


Collier's for January 10, in Two Sections. *Section ONE*

Collier's

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THE LITERARY WEEKLY



*G.O.P.—Revived
with the
Original Cast*
By E. G. LOWRY

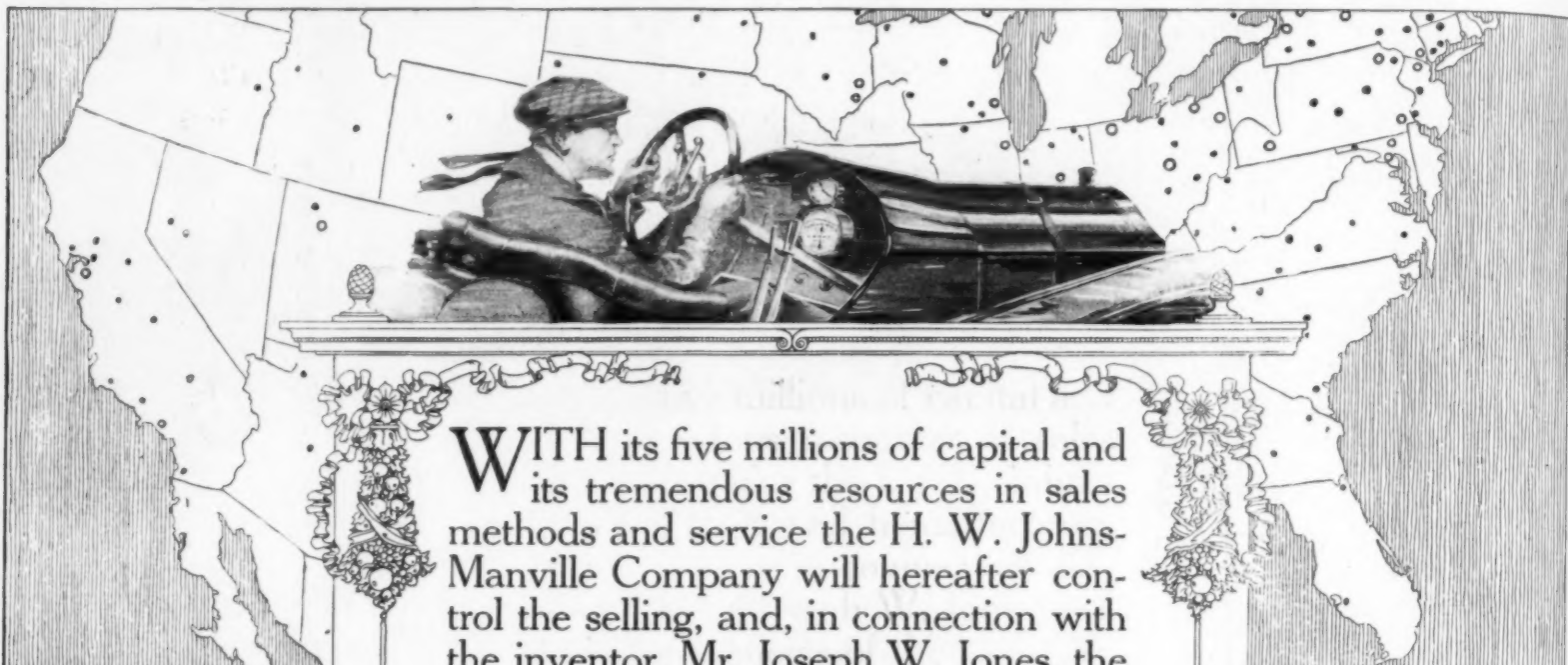
*Rash
Conclusions*
By GEORGE FITCH

*The Tempter
and Maria*
By HENRY P. DOWST

*Western Football
Against Eastern*
By FIELDING H. YOST

Published by

Johns-Manville Service Branches in 49 Cities assure satisfactory service to Jones Speedometer owners
 Circles on map indicate J-M Service Branches Dots indicate location of direct representatives



WITH its five millions of capital and its tremendous resources in sales methods and service the H. W. Johns-Manville Company will hereafter control the selling, and, in connection with the inventor, Mr. Joseph W. Jones, the manufacturing policies of the

Jones Speedometer

Centrifugal Principle

This means that the owner of a car equipped with a Jones Speedometer is assured convenient and efficient Johns-Manville service, wherever he may be.

Forty-nine Johns-Manville Service Branches, and in addition, 589 direct representatives all over the United States, insure to car owners a thoroughly organized repair and replacement service.

—and in supplying this universal expert supervision, only the H. W. Johns-Manville Company has the advantage of being able to distribute the great cost of this service over a line of high grade Automobile Accessories rather than a single article.

On account of the great number of Johns-Manville Service branches, the Jones Speedometer is as conveniently kept in repair as your watch.

The Jones Speedometer, with its scientifically correct centrifugal principle, was added to the Johns-Manville list of automobile accessories because, after repeated tests, our engineers declared it to be the most dependable speedometer.

The invention of Joseph W. Jones made it possible for the car owner to install a speedometer that is not affected by temperature, vibration, or magnetic influence—and that gives correct readings at all speeds.

To the unrivalled mechanical qualities of the Jones Speedometer has now been added the equally unrivalled quality of the Johns-Manville Service.

—and this positive guarantee, which covers both mechanical perfection and service integrity, is symbolized by the H. W. Johns-Manville guarantee tag which is attached to every Jones Speedometer.

You can have the Jones Speedometer installed in any car if you specify it.

Send for booklet describing why the centrifugal principle insures accuracy in Jones Speedometers—and learn about the efficiency of the H. W. Johns-Manville Service.

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Manufacturers and Marketers of Brake Lining, Spark Plugs, Electric Lamps, Speedometers, Horns, Fire Extinguishers, Dry Batteries, Vaporizers, Auto Locks, Fuses, Tapes, Packings, Roofings, Pipe Covering, etc.

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Note this H.W. Johns-Manville Guarantee tag on every Jones Speedometer

The tag that insures mechanical perfection and service integrity.



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This list is being steadily increased



A little bird is telling him to buy

**WRIGLEY'S
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by the box—at most dealers—for 85 cents!

It's the economical way to get better appetite and better digestion—brighter teeth and purified breath. You can give this delicious aid to yourself and your family for less than a cent a stick—if you buy it by the box. You'll always have something to offer your friends—it stays fresh until used.

*Each box contains
twenty 5 cent
packages*



Chew it after every meal.
*It's clean,
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It stays fresh until used.

**Be SURE it's
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Look for the spear.

Chalmers-1914

The New "Six"



\$2175

Fully Equipped-f.o.b. Detroit

In Record Time the Master "Six" Has Sold Itself to the Nation

Public opinion has endorsed our own belief in the new Chalmers "Six."

Record sales prove the new "Six" the most popular of all Chalmers cars. East, West, North and South this Master car has leaped to instant favor.

We began shipping 1914 cars the last of August. In September we received twice as many orders as we could fill. In October we shipped 1,111 cars—the biggest single month's sales in the history of the Chalmers Company. In November we had more orders on our books for the new "Six" than for any other model we ever built. In December, instead of slowing down for the winter, we kept the big Chalmers factory running full force. The country over, Chalmers dealers have been unable to fill *all* their orders.

This phenomenal sales record is simply the result of unusual value in the Master "Six."

For the 1914 Chalmers "Six" sells itself.

We have made strong claims for the new "Six"—claims that have caused a sensation in the motor world.

Yet every claim has been proved.

The Chalmers Standard Road Test reveals the Master "Six" through a course of sprouts which can neither hide its defects nor exaggerate its virtues—a trial such as not one owner in a thousand would give his car.

This is the plan by which the Master "Six" has sold itself to the nation.

Here are extracts from a few of the scores of letters we have received from owners of the Master "Six". Read how this great new car is making good wherever motor cars are used. And please feel free to write any Chalmers owner. We rest our case for the new "Six" with the opinions of the people to whom it has sold itself.

Read What These Owners Say About the Master "Six"

Price Doesn't Indicate Real Value

I did not believe there was a car built at anything like the price that would do what this wonderful "Six" does. All I can say is that everything you claimed for it has been fulfilled in performance—and then some.

It climbs such hills on high as I never believed a car could mount. The motor is practically noiseless. The new one-motion electric starter can be described by only one word, "perfect."

You have brought into my life a factor of enjoyment for which the money I have paid for it does not begin to compensate.

W. L. HARRIS, President
New England Furniture & Carpet Co., Minneapolis, Minn.

Chalmers-Entz Starter Works Perfectly

I wish to express my pleasure and satisfaction in the new 1914 Chalmers "Six" which you recently sold me. I have tried this car out very thoroughly; have been away on several long trips, over bad roads, and have yet to find a cause for complaint. I wish to state my appreciation of the perfect working of your new self-starter. Not once since I have had this car has my chauffeur had to leave his seat to crank up.

To sum up, it is a comfortable, luxurious, and in every way a satisfactory car.

BERNARD LOWENTHAL, President
Acme Lace & Embroidery Co., 100 Fifth Ave., New York.

Equals Highest Priced Car

The Chalmers Model 24 "Six" you delivered to me October 11 has been in use every day since without trouble.

I have driven several high priced cars, and consider the performance and looks of the new Chalmers as good as any car at four or five thousand dollars.

W. A. CHEATWOOD, 1511-1513 E. Main St., Richmond, Va.

Didn't Know He Had Tools

You may be interested in knowing how the Model 24 in which Mrs. Tucker and I left your factory Saturday evening last, has behaved. We encountered rain, mud and heavy sand all the way from Ypsilanti to Terre Haute, Ind., yet reached Mattoon, a distance of almost 500 miles, with no trouble at all. Never had any of the tools out. In fact, I did not know what tools there were. The starter never failed. Mrs. Tucker drove the car a portion of the time with the greatest ease.

E. B. TUCKER, Secy., Daily Journal-Gazette, Mattoon, Ill.

Car Itself Better Than Our Claims

The 1914 Chalmers "Six" is, in my opinion, a better car than any other make on the market at the same price.

I bought your Model 24 without a demonstration as I was convinced it was the car I wanted and that it would ride smoothly and easily. I am more than pleased, as it has demonstrated itself beyond my expectations.

The Best Car for the Price

After driving my new Chalmers "Six" nearly 3000 miles I am even more pleased than when I first received it. As you doubtless know, this mileage has been distributed over not only state highways but also country roads of all kinds through the Adirondacks and Berkshires.

Its hill climbing ability, flexibility and general quietness of operation are particularly commendable. The electric starter and lighting system operate perfectly.

I consider it the best car for the price on the market today.

W. M. DEMING, General Electric Co., Schenectady, N.Y.

New "Six" Motor is Ideal

The new "Six" is the most complete and best all-around designed car that has ever been produced and I am more than pleased with the whole appearance. The motor is ideal. The electric starter is a masterpiece. You have reduced everything to its simplest form.

GEO. B. POOLE, 70 Kilby St., Boston, Mass.

Prefers Master "Six" to Any Other

My six-cylinder Model 24 has given satisfaction far beyond my expectations.

The pleasure I have had with it is such that I would recommend it to any of my friends who are considering the purchase of an automobile at any price.

DAVIS PEARSON, 904 Walnut St., Philadelphia, Pa.

You cannot be sure of getting the best automobile value unless you examine carefully the merits of the Chalmers Master "Six" and make a careful comparison with other cars. We offer you the way to such examination and comparison—The Chalmers Standard Road Test. Any Chalmers dealer will be glad to give you this test at your own convenience. Catalog on request.

Chalmers Motor Company.
Detroit

Needs Only One Transmission Speed

The new Chalmers "Six" is designed to meet the wishes of anyone who wants a good car of moderate price and low up-keep. Nearly all people have ideas as to what ought to be in a good machine. I believe that the new "Six" just about fills the bill.

A person who never owned an automobile or drove one, could throw the switch and start the "Six." The improved disc clutch makes it easier to make a good start than a bad one. Not a jerk to it. Some of the speeds seem unnecessary. I have started on any of them, but I suppose that when you are in the mud, sand or water they ought to be used. Its speed capacity is more than I care to monkey with.

F. H. ROBERTSON, Sec. & Treas.
Hartford Western Land Co., Wichita, Kans.

Every Claim Fulfilled

My beautiful Chalmers car is giving the very best of satisfaction and service. It is all that you represent it to be.

FRED A. MAILANDER, Pres., The Mailander Co., Waco, Texas.

New "Six" Best Buy on the Market

In the thirty days since I received my Chalmers "Six" it has fulfilled every claim made for it. I have driven it over 1000 miles; I have thoroughly enjoyed every mile of it.

One of the first trips taken was through very heavy roads, but that made no difference. It pulled through 35 miles, without my once shifting to a lower gear.

This car in my mind is the handsomest on our streets. I conscientiously believe that you have in the new "Six" the best automobile "buy" on the market regardless of price. It looks as if your success this season depends merely upon being able to supply cars to fill your orders.

W. E. EGLE, Waterloo, Iowa.

Easy Riding; Strong Pulling

I surely appreciate the ease with which my Chalmers "Six" carries itself over the rough pavements of our city.

The engine is a marvel. Its pulling qualities are simply wonderful. Its ability to throttle down on high speed is something in which the prospective buyer should be more interested than that the machine can run 75 miles an hour on high. The steering gear makes it glide around corners as though it were automatically controlled.

ALFRED B. KOCH, The LaSalle & Koch Co., Toledo, Ohio.

Collier's

THE NATIONAL WEEKLY

Volume 52 Number 17

January 10, 1914

G.O.P.—Revived with the Original Cast

By Edward G. Lowry

DRAWINGS BY F. G. COOPER

WHEN the Republican National Committee met at Washington in December, it held its meetings in the red parlor of the New Willard Hotel. This is a room that in

the subdued splendor and richness of its decorations and furniture would fulfill David Belasco's conception of a second-act interior (afternoon of the same day), the drawing room at Borris-in-Ossory, the Duke's country seat. The shaded electric cast a soft light through rose-colored silk. The Horn of Plenty had been spilled to set the scene. Conceive in this environment, if you will, Reed Smoot, desponding: "The silent wheels in the factories, the smokeless stacks of our mills, and the suffering of the people under a Democratic Administration will speak louder than any national declaration of principles that we can make. All we will have to do to bring victory to Republican banners will be to point to the closed mill doors and say: 'Wilson; that's all.'"

Same Old Play

THE voracious chroniclers present all agree that this was greeted with wild applause. Sherman Granger of Ohio said: "If you have a convention, you may make the party look ridiculous in the eyes of the country. Democratic legislation and the conditions we now have in the country—those are your platform." These are the views that prevailed.

A man walked into the lobby of the New Willard Hotel the first day of the committee meeting and looked about him at the collection of old political war horses drawn there by the meeting of the Republican National Committee. It was the first time they had all been assembled since the 1912 Chicago Convention. This observer looked at them critically. They had not changed a particle. The aroma of their big, fat cigars filled the air. To men who have gone forward with the movement of the times it seemed somehow like walking into a collection of familiar ghosts, and it inspired this observer to say: "Gentlemen, if the roof fell in at this minute, the whole Republican party would be killed."

That is just about true. An atmosphere of the past enveloped the lobby groups. There was "Joe" Keating of Indiana and "Jim" Watson, sitting on the National Committee with a proxy from Mississippi, and "Uncle Joe" Cannon and Hemenway and a dozen others powwowing or whispering to one another in little groups just as they used to do when their powwows and their whispers meant something and had some political sig-

party policies. A great many of the Republicans assembled at Washington seemed to think that they were coming back into power through the votes of an electorate pressed by the rigor of hard times.

It was curious and interesting to observe how the sentiment that had existed for a spring convention to enunciate principles was dissipated after the gathering of Republicans had assembled. The outlook was too stormy to risk it. Men who for weeks had been talking in favor of holding such a national convention preliminary to the Congressional elections next autumn changed their minds after talking with their fellow committeemen and others, and voted against a convention.

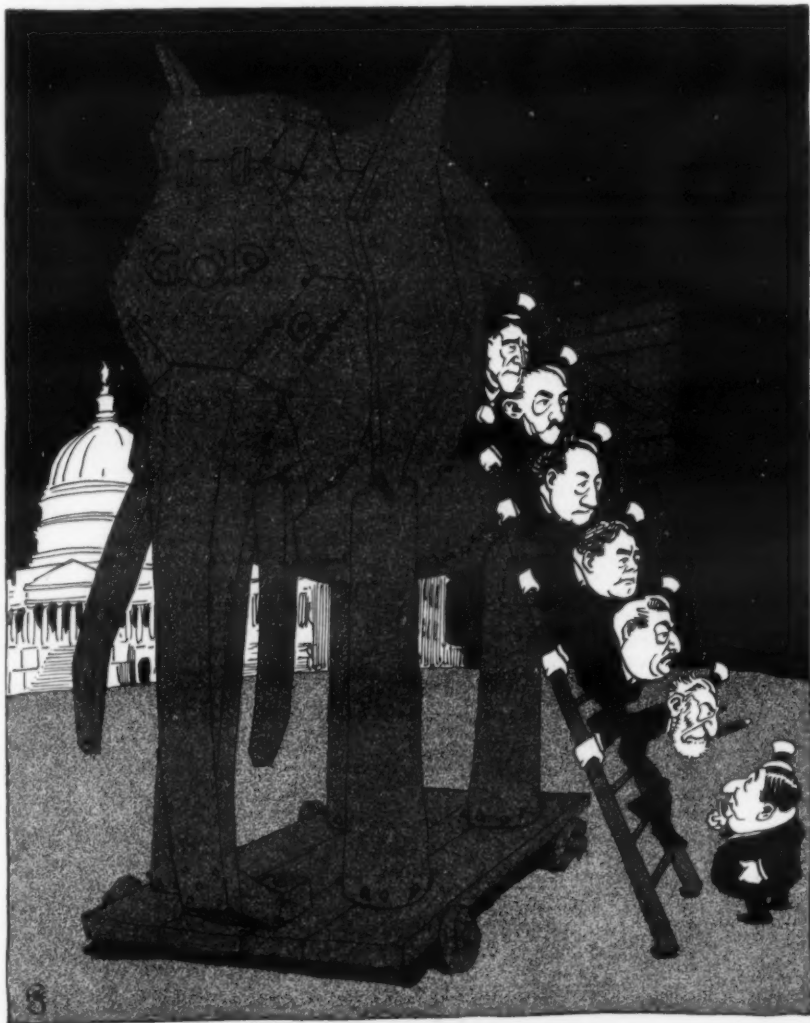
A Soup-House Overture

AFTER getting a formal decision from its law committee that it had no power to make any change in the apportionment of delegates to national conventions, the National Committee, under the stress of fear of the bad feeling that would be disclosed at a national convention, if held in the immediate future, coolly shelved the finding of its own committee, and resolved to change the basis of representation so as to reduce the number of Southern delegates and arrange for the delegates to be selected at primaries in the several States.

All of the talk before the National Committee met was that there would be no national convention of the party prior to the nominating convention in 1916. The plan afoot was for the National Committee to fix upon a new plan of apportionment of delegates to national conventions; to have them elected at primaries in the several States, and to abandon the idea of holding a harmony convention next spring. This plan was fathered by the conservative element, and they seemed to feel assured that they had the votes to put it into effect.

The burden of conversation among the committeemen and the other Republicans attracted to Washington by the committee meeting was that they should put their faith in the hope that calamity would overtake the country under Democratic administration. Their idea seemed to be that it worked before, and why not now? They were all talking "hard times" and "depression" and "calamity" and soup houses, and their watchword seemed to be: "Remember what happened in 1893." Ex-Speaker Cannon struck the keynote in the long statement he gave out for publication after his arrival.

It was in the old man's best vein; the sort of stuff that used to rally the boys and fill them with enthu-



The classic trick—but it doesn't fool Washington

nificance. It all gave, somehow, the impression of the revival of an old, old play, with the original cast.

Never did the Republican party appear less formidable as a political organization than it did as represented by its National Committee. It has no leaders and it has no principles. It needs a "moral issue" about as badly as anybody ever needed one. It needs inspiration. "Soup houses must come" is not an inspiring battle cry. A hope that the Democratic party will be devastated by the sight of bread lines in the big cities this winter surely touches zero in party politics and

slam and ginger. It belonged to the political epoch when all statesmen left the tops of their vests unbuttoned and wore congress gaiters with elastic sides. It was the sort of production that you sometimes hear described as literary remains. "Uncle Joe" hasn't heard the news. He doesn't know yet that the old, historic Republican party, which he joined when a boy and which kept him in office year after year, is dead. He has read nothing in the 1912 elections except the defeat of one political party by another. Coming out of Cincinnati one time, I chanced to overhear two shoe drummers in the smoking compartment of a Pullman car talking about trade prospects.

"Where have you been?" asked one.

"Making the South Carolina towns and Charleston," was the reply.

"Do any business?"

"Business!" the drummer snorted. "Business! Why, say, all the people down in that country are still

busy gettin' ready to send reinforcements to Lee."

In a way of speaking that story reflects the viewpoint and state of mind of Mr. Cannon and most of his old-time associates who came to Washington for the National Committee meeting. Here are some bits from the ex-Speaker's "keynote" utterance:

"These gentlemen may plan 'get-together' clubs from now until June, 1916, but the rank and file of the old protection phalanx are already together, and they are not asking for any new political nostrum. It is only the man who has money to throw away who has

new diseases and looks for new remedies.

"A rich man may have neuritis, but a poor man has only rheumatism; he can't afford to have neuritis. Well, the people now find that they have just old-fashioned rheumatism in their business conditions and they are ready to go back to the old remedy which has been effective in cases of business rheumatism in the past.

"If the boys here [meaning the National Committee] want to organize a get-together club to meet in Washington, or New York, or Indianapolis, to give you newspaper men something to write about and, incidentally, to mend their own fences at home, I have no objection, but it will not help the Republicans of the country to get together, for they are already together at the mourners' bench convicted of their past folly. They now are united to fight the common enemy, regardless of all leaders and all isms, regardless of the basis of representation, Presidential primaries, referendum and recall, social justice, and all other literary phrases.

"They are not caring three whoops what these gentlemen here do, or what you write about their doings. The people are watching the corners to see how they are going to make the turn and weather the storm.

"No, I am not a calamity howler and I have no ill will against the present Administration. I am just kicking against the conditions produced by the Democratic effort to carry out their policies, and if you want to know how many other people are kicking just go out through the country and take a few notes.

"The men who nominate the next President will make the platform on which he is to stand and which will be the issue in the campaign. And, judging from present sentiment as I hear it expressed, the Republicans will be satisfied with a simple platform promising a return to protection and prosperity."

On the whole, it was a backward-looking and not a forward-looking group of Republicans that met in Washington. They were inclined to base their hope of political success on a temporary slackening of commerce and material prosperity in the country. They had no principles to enunciate. The minority progressive element that sought to establish a platform of convictions before the Congressional elections next November were told:

"Let the candidates establish their own platforms and base them on local conditions."

As a matter of fact, the majority of Republicans that assembled in Washington were afraid to call a national Republican assemblage to endeavor



I stand pat says Penrose

to discover what common basis of belief they have. The wounds of 1912 have not healed.

In the end the National Committee resolved to reduce the number of delegates to Republican national conventions from 1,083 to 903. The representation of the South was reduced from about 245 delegates to 165. In the process of reduction the South lost 78 delegates and the North 8; The Southern States that lost and the number of delegates they had to give up are: Alabama, 9; Arkansas, 3; Florida, 4; Georgia, 10; Louisiana, 7; Mississippi, 8; North Carolina, 3; South Carolina, 7; Tennessee, 3; Texas, 15; and Virginia 9. Hawaii's representation was reduced from 6 delegates to 2.

Paring Off Southern Delegates

REDUCING the number of Southern delegates was a good job. It should have been done long ago.

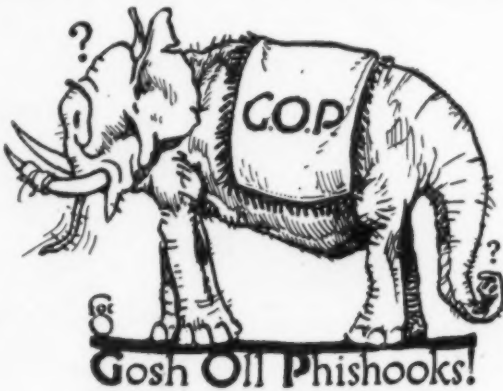
The report of the Chicago conference of Republicans held last winter brought out that in the Presidential election of 1908 South Carolina, Georgia, Florida, Alabama, Mississippi, Louisiana, and Arkansas cast 151,698 votes for the Republican nominee for President. The percentage of this Republican vote to the total vote, of course, varied in the different States, but ran down as low as 6 to 7 per cent in Mississippi and South Carolina. Yet these seven States under the apportionment plan now prevailing sent 140 delegates to the Republican convention of 1912. Contrast this with the situation in some of the usually Republican States. Twelve of such States—Maine, New Hampshire, Vermont, Rhode Island, Connecticut, Michigan, North Dakota, South Dakota, Utah, Wyoming, Washington, and Oregon—also sent a total delegation to the last Republican convention of 140. The combined Republican vote of these twelve States in 1908 was slightly over a million—almost seven times the Republican vote of the seven States first enumerated.

South Carolina, which in 1908 cast 3,963 votes for the Republican nominee for President, sent eighteen delegates to the national convention to nominate the next President, or one delegate for every 220 votes thus cast. Iowa, which in 1908 cast 275,210 votes for the Republican nominee for President, sent twenty-six delegates to the Republican convention to nominate the next President, or one delegate for every 10,585 votes thus cast.

Thus the voice of one South Carolina Republican was, in effect, given equal weight with the voices of forty-eight Iowa Republicans by the last Republican national convention.

A Grotesque Inequality

SIMILARLY Mississippi, which in 1908 cast 4,363 votes for the Republican nominee for President, sent twenty delegates to the Republican convention, or one delegate for every 218 votes thus cast. Illinois, casting 629,932 Republican votes, sent fifty-eight delegates, one delegate for every 10,861 Republican votes; Michigan, thirty delegates for 335,580 Republican votes, or one for every 11,186, and Ohio, forty-eight delegates for 572,312, or one for every 11,923. Thus one Mississippi Republican was equal in the con-



Gosh Oil Phishooks!

vention to fifty Republicans from Illinois, fifty-one from Michigan, and fifty-five from Ohio.

It was this grotesque inequality that influenced the National Committee to pass the following resolution:

"Confident that the action of this committee, representing, as it does, the practically unanimous sentiment of the Republican electors of the United States, will be ratified by the electors of the States; be it

"Resolved, That this committee shall issue the call

for the national convention to be held in the year 1916 to nominate candidates for President and Vice President, in accordance with the following basis of representation:

"Each State shall be entitled in such convention to four delegates at large, one delegate at large for each Representative at large in Congress from any State, one delegate from each Congressional district, an additional delegate from each Congressional district in which the Republican vote either for electors in 1908 or for the Republican candidate for Congress in 1914 shall have been not less than 7,500, and for each delegate chosen an alternate will be chosen in accordance with the practice in the various States.

"Provided, however, that the above basis of representation shall not be made the basis of the call for the national convention to be held in 1916 unless prior to January 1, 1915, the Republican State conventions held under the laws of the States or called by the Republican State Committees of the States in such number of States as are entitled to cast the majority of votes in the present electoral college shall ratify the action of this committee in respect to determining this basis of representation."

Coupled with this was the acceptance of the primary laws in all the States and the agreement to strip the National Committee of the power to "go behind the returns" and seat or unseat delegates after contests have been argued before it. The acceptance of the primary laws of "all States" was a recognition of the method of delegate choice in California, where all delegates are elected at large—recognition also that one more trench in the "standpat" line of defense had been found untenable. The only restriction left was that the total number of delegates named in the convention call must be chosen by any State which has such a primary law.

Concessions Are Only Expedients

THE "hands-off" limitation upon the National Committee will practically reduce to nothing the contests before the committee. These concessions were frank manifestations of opportunism; nothing but expedients. The Republicans who assembled at Washington seemed to think that nothing but a flat tire kept their machine from moving. They didn't realize that they were stalled because of engine trouble.

Wiping from the body of the car the black band of Southern representation doesn't affect the motive power. There was an entire failure to concede the lack of driving impulse or to acknowledge that the pulse of the old machine has stopped beating. The transmission gears are stripped. "Little old last year's model" is ready for the scrap heap, and all the painting and fresh upholstery that can be devised won't put the power of locomotion in it again.

If the Republican party is to be made over, if it is to become an effective political organization and anything more than an anti-Democratic faction, the task will have to be taken over by other hands than those who assembled and dominated the National Committee meeting at Washington. They exhibited no faint ray of understanding of the present public state of mind in the United States and of the new attitude toward government and political and party processes. From all they said and did, the just inference is drawn that they are not even remotely aware of the meaning of the 1912 elections. They seemed to think that they represented merely a political party defeated and not a political school of thought that has been destroyed.

Tony Pastor used to say that the first time he appeared on the stage at Newark, wearing an opera hat which he opened and closed as he sang, the morning papers said next day that he was a good magician but had but one trick. Like George Ade's friends, Zoroaster and Zenda, who in the end did not understand why they "got the hook," the Republican National Committee are still relying upon their "old stuff" to pull them through and regain their old-time political ascendancy. They are waiting hopefully for the second stanza to come true:

Out came the bloody sunshine,
Dried up the bloomin' rain;
And the bleedin', bloody beggar
Flew up the spout again.



I stand pat says Crane



I stand pat says Barnes



I stand pat says Watson



I stand pat says Borah



I stand pat says Hadley

The Tempter and Maria

By Henry P. Dowst

ILLUSTRATED BY LUCIUS WOLCOTT HITCHCOCK

BACK in Melinda some folks believed that Billy Keep and Maria Quinn had eloped. As a matter of fact, they did leave town the same day, but on different trains. Billy Keep ran away. Maria, on the other hand, had her mother's consent, obtained ruthlessly enough to justify the assertion that she helped herself to it. Mrs. Quinn used to cry when she enumerated the hows and whys of Maria's going to the city, alleging reasons accepted all too lightly by her incredulous neighbors.

She said Maria had a fine job and sent her money, and her friends believed her—about the money; for she sometimes had a new dress and the children looked a little neater. Johnny, the boy next to Maria, was now working for Jim Roberts, the grocer, and Mike, who sustained the prerogatives, if not all the responsibilities of husband and father, surely was drunk no oftener and loafed no more days than usual. On the whole, times of comparative prosperity came to the Quinn family. Mike was, therefore, fain to seek the approval due a successful paterfamilias.

"I tell yer," he said, "bringin' up a family's no joke. Guess I oughter know; ain't I had six young ones to feed an' clothe? Fill up them glasses again, Leo—an' make mine ale. I gotta be goin' home; my ol' woman raises hell when I ain't to me meals on time. Here's regards."

"My Mike never lifted a finger to me since the day we was married," protested Mrs. Quinn, nursing her discolored cheek bone with a tentative finger tip. "A piece o' kindlin' flew up an' took me in the face. I'd like to see the man who'd dare lay a hand to me."

SHE was fairly sure to get her wish in about ten minutes if Mike wasn't late for supper. Not that her husband gave very frequent exhibitions of that sort of daring; by and large, Mrs. Quinn thought she had little call to complain.

"Mike's had hard luck," she insisted, pathetically hungry for credence. "He's as good a man as the' is in Melinda when he's sober, an' he drinks very little at that. Anyway, they say 'tis a good man's failin'."

Maria's remittances were not so large or numerous or regular as Mrs. Quinn wanted her neighbors to think. But they helped. As a financial proposition things were easier after Maria went away and sent home what she could than they had been when she lived with her parents and turned over to her mother the bulk of her wages at the mill. Mrs. Quinn understood that Maria earned ten dollars a week, and accepted the monthly three or four dollars from her daughter without serious qualms. Jim Roberts paid Johnny four dollars a week, of which the boy gave Mrs. Quinn three, and she was a capable "manager."

One day a letter came from Maria without any inclosure; her mother read it three times.

DEAR MA, I am sorry I can't send you the money this month but the truth is I got to have some new clothes mine are real shabby and when I get my suit paid for I will send you some money agen. hope you will get along all rite as Johnny is working now and I will soon send you some anyhow
Your loving daughter MARIA.

MRS. QUINN dropped a tear or two on Maria's note that night after Mike had gone to bed.

Then she penned a laborious letter with her unaccustomed, work-stiffened fingers. Sighing tremulously, she pulled open her bureau drawer and, from a careful, remote hiding place, produced a five-dollar bill, folded small and tied with a piece of thread. This she inclosed with her letter:

DEAR MARIA I got your letter. I am glad you are gone to have a new sute I wish I could see it—well here is 5 dollars your pa give me to help pay for the sute he is working stedy now and not drinking haf so mutch he is a good man your father I alwas sed so I hope you will like your new sute and no hurly about you sending us money we will git along all rite and you have been such a good gurl to send us wat you could and appreciate it a thousin times god bless you from
your loving Mother.

When Maria got this letter—but wait. Maria had a job in the city, and she did earn ten dol-

lars a week, but she got only six. She worked in a department store that swarmed every day with shoppers who couldn't afford to buy elsewhere. Many of the women carried babies, since they either had to take the babies with them or stay at home. This was good neither for the babies nor for the mothers. At Sneddenfeld's economy was the watchword; even the air was used over and over again. Maria wondered nights why she had so continuing a headache.

AT LEAST one store like Sneddenfeld's is necessary in every large city.

In order to sell its merchandise far cheaper than more select shops, Sneddenfeld's required Maria to work for six dollars a week. For the goods to be largely shoddy or sleazy or skimped was likewise essential. Frequently they were the products of underpaid, badly housed labor, or bought from other firms that had become bankrupt. Thus, if you are poor, you must help to force poverty upon others, who in turn do their part in crushing you deeper into your own indigence. But this is only a story, and not a treatise upon economics. Had you asked Maria if she believed in the establishment of a "minimum wage," she would likely have inquired sharply: "Ain't we gittin' small enough pay ulready?" If eight dollars is as small a weekly wage as a girl can live upon in honesty and virtue (according to some statisticians), do not hastily infer that Maria Quinn was neither honest nor virtuous, for she was both; and she sent her mother an average of over three dollars a month. She was even nourished, to an extent generally considered reasonable for a person in her station. On the whole, Maria had begun to view life a little less bitterly than she did upon a certain night when she asked old Winslow Trude, the meanest man in Melinda: "Why wouldn't I steal? B'lieveme, three dollars goes a long ways in our family."

SHE dressed meagerly in black, wore white collars which she laundered herself and dried on the mirror, and ate ten-cent lunches. Her room, breakfasts, suppers, and Sunday dinners cost three dollars and a half a week, and she walked to and from work. Thus, when she set apart a dollar for her mother, as she did at least three weeks out of each month, she found ninety cents left to do with as she pleased. It is almost a task to imagine what she could find to do with the extra dollar when she did not send it to Mrs. Quinn.

Maria did not apply to the purchase of a new "sute" the five dollars she received from her mother, for she bought no new suit. That was her small deception; no need to distress Mrs. Quinn by writing her that she had been fired. Business was dull, because the shipbuilding company had lost a big contract and shut down to half time; because the foundries were short of work and laying off men; because the longshoremen had struck for more wages and were, consequently, getting no wages. Sneddenfeld's discharged fifty-seven girls, and Maria was one of the—but this is no occasion for levity.

What would you do if you were a Maria Quinn out of a job? Go to the Christian Young Women's Aid Society, or the Employment Bureau of the Federated Educational and Industrial Guild, or the Little Sisters of St. Melissa; fine-comb the "female help wanted" puzzle in the morning papers?—of course you know about all these resources of the resourceless unemployed; Maria didn't. She had heard only of the "Young Women's," and went hopefully thither.



LUCIUS WOLCOTT HITCHCOCK

"All right," he said fiercely, "then I'm goin' to croak you. You don't git out o' here alive unless you give up that pin, see?"

A SELF-CONTAINED and matter-of-fact assistant placidly entered Maria's name on a card, along with numerous items of negative information touching her experience in the field of bread-winning endeavor.

"We have had no inquiries for sales people lately," the assistant explained, "and vacancies for inexperienced girls are very scarce."

She meant to be kind, but she had a good job herself, and had long ago learned to satisfy her sense of duty by ministering methodically to the misfortunes of others and to check that excess of sympathy which, as with doctors and trained nurses, would have upset her nerves and interfered with the business of life. Maria knew nothing of the reasons that governed the assistant; she only saw a calm, assured professional smile, and heard a cool, even voice. Consequently she eyed that young person with embarrassed resentment.

"I haven't no references," she stated dully, "except Rupert, the buyer in the kitchen ware at Sneddenfeld's. You can ask him am I honest, if you want to."

"I think," said the assistant, "you might do better at the domestic bureau, third floor. I will place your name on file." She turned to the telephone. "Yes? This is the 'Young Women's.' Eureka Candy Company? Three chocolate dippers? You pay what? Let me have your number, please. I'll—"

MARIA didn't hear the rest. She climbed two flights to the domestic bureau. Eight fellow creatures sat in a dumb row along the wall, awaiting the call of the frying pan and the dustless duster. Another assistant acid-tested Maria with questions.

"We could get you a place," she said. "The pay would be only three dollars, as you have had no experience. Would you take care of children?"

Maria shuddered.

"No'm," she said. "I guess I don't want a domestic job. Maybe I'll come back."

She went out and drifted along Atlantic Street, where the shoppers were thickest. She hated to go

back to her boarding place, for she had only eight cents left from her mother's five-dollar gift, and her board was three days past due. The noon hour was filling all the dairy lunch rooms and sandwich depots with hungry work people. Maria couldn't get much of a meal for eight cents.

"Hullo, Maria Quinn!" said a hearty voice at her elbow.

"Billy Keep!" returned Maria.

THE young fellow shook hands with her.

"What you doin' here?" he asked.

"I—I been workin' to Sneddenfeld's, in the kitchen ware."

"How long you been away f'm hom'?"

"Most two years. Didn't you know I left the same day you run away?"

"No! You don't say! I never hear f'm them people. They got no use for me; I'm a black sheep." He laughed a little, malicious chuckle. "Have you had your eats?"

"Me? I was just goin' to lunch at the Ritz-Astor."

"Same old M'ria," grinned Billy Keep. "Come on, I'll blow you. Buy you a drink, too. 'Member that night I tried to get you into Leo Keppler's—the night it snowed so? An' you wouldn't go, an' plinched my arm? You was some kid, M'ria; look pretty good now, too; I guess you ain't so skinny like you was in them days."

THEY were walking with the crowd. Billy Keep turned down Winn Street and Maria went with him. She used to hate Billy Keep, but she was very hungry. Back home he had been a nasty youngster, a sneak, and town rowdy. Today his easy grin suggested something near and friendly, out of a drear and friendless past.

They went into McNulty's Hotel, a cheap café with beer signs flanking the main door and a ladies' entrance, from whose threshold a flight of dingy, red-carpeted stairs led above. Maria looked up and saw a couple of girls peering down at her; they giggled, and one called: "Hello, Bill," in a hoarse, throaty voice.

Both disappeared before Billy Keep and Maria reached the top. The ladies' café was neither large nor clean, though fairly well filled, mostly with young and wise-eyed women, who drank beer. The newcomers sat down at a table by a window, and Billy Keep ordered a steak and two bottles of beer.

"You drink mine, Billy," said Maria. "I don't like it."

"Want some redeye?" politely invited her host.

"No; tell 'im to bring me a cup o' coffee. I ain't never learned to drink. You know Mike always done enough o' that for our whole fam'ly."

"You was always the white-ribbon kid," laughed Billy Keep. "The's nothin' to that cold-water stuff, M'ria, take it from muh; you might's well git yours as you go along. You only got one life to live; a few drinks ain't no harm."

He drained his beer glass appreciatively. They talked of affairs in Melinda. Billy Keep asked questions: How was Thad Wilcox an' Jim Roberts? Did Mamie Welch an' "Stoop" Ryan git married? Was Win Trude alive—the old rat? Billy had a darn good mind to go back to Melinda an' soak old Win on the bean an' cop some o' that coin he'd been miserin' all these years.

"SWELL chance," remarked Maria with scorn. "He keeps it in a bank, not a sock. He ain't a fool. What kind o' job you got, Billy?"

"I'm wheelin' out smoke for a gas factory," said her companion.

"No, honest, what do you do?"

"I—I'm a brakeman on the M. & K.," he replied glibly.

Maria looked at his hands; they were smooth and white, a diamond gracing one finger.

"Tell it to Sweeney," advised Maria, and fell silent.

Billy Keep drank the second bottle of beer and looked at his watch.

"Ain't you got to git back?" he asked. "It's quarter past one."

She shook her head.

"No hurry, I guess." Perhaps she was a little drowsy; anyway, she was rather hopeless. Billy Keep leaned across the soiled cloth and eyed her shrewdly. "You been kiddin' me?" he inquired. Maria looked vacantly out at the seldom-washed window.

"Hell!" said Billy Keep. "You never come around this dump none."

"Of course not," she returned.

"WELL, where do you hang out? The Green Bug? Haggerty's? Hotel Florence? I never seen you at none o' them places—"

"Whadda you mean, Bill Keep?" sharply demanded Maria. "You better back up; you're slippin'. I don't go to such joints as them. Jest because I leave you buy me a steak, do I have to be insulted? I lost my job at Sneddenfeld's, that's all; an' I ain't

time," Billy Keep informed her. "I'm out of town a good deal. But you could get a line on me by comin' here and inquiren' of Joe Prague, the head waiter. I could make life a lot easier for you if you'd let me, M'ria. Say, if you need anything, call on me, will you?"

"I don't know; I might," said Maria.

THEY went out into Winn Street and made a brief farewell at the door. Maria returned to Atlantic Street and hunted vainly for a job among the shops until late in the afternoon. She had eight cents and owed for ten days' board and lodging. Presently she passed the great, gaudy show windows of Sneddenfeld's, and, coming to the main entrance, turned in; why, she did not know. She was like a small, shabby boat, and Fate held the tiller.

Maria's department was in the basement, so she kept to the upper floors. Closing time was as yet a quarter hour off, and Maria wanted those few minutes to rest while making up her mind to brave a return to her boarding house without means of settling her debt or the prospect of work on which to base a promise.

She knew where she could sit quietly and think it over—in the "model flat," on the second floor, next the home furnishings.

THE model flat was designed to show young couples the attractions of a luxurious home, furnished on nothing down and a dollar a week. The four rooms were equipped with an elegant five-piece parlor set, a sumptuous seven-piece dining-room set, an elaborately carved chamber set, a magnificent, nickel-trimmed coal range, and eight lovely, high-art landscapes in rich gold frames. Several gorgeous Oriental rugs, imported from Lowell or Worcester, dressed the floors, while two pairs of superb, almost Irish lace curtains draped the parlor windows. The entire outfit was a riot of imitation woods and fabrics, in cheerfully unashamed taste. You could have it delivered "on lease" at the low price of \$137, "payments arranged to suit purchaser." The advertisement said so.

Maria regarded the model flat with envious admiration. Now she slumped down into a large, green-plush rocking chair, and relaxed every weary muscle. Her brain also relaxed and refused to do any more of Maria's thinking. Her eyes roved dully from picture to picture, too tired to widen at the noisy, rollicking contrasts. Somewhere in the store a big gong clanged the closing signal, but Maria did not hear it. The electric bulbs went dead, but Maria did not miss their vanished light. She was asleep.

The big store became as quiet as a church. The rattle of wheels outside lessened and gave place to the more attenuated night noises of the city. Theatre-bound motors honked, trolley cars jangled and buzzed; a street piano tinkled at the curb below, but Maria slept on, her head tipped against the comfortable roll at the top of the green-plush rocker.

When she awoke she had a stiff neck, but no idea of the time. She came to herself with a frightened gasp of dismay, her orientation baffled. Then:

"Gee!" she groaned; "how'm I ever goin' to get out? Ain't I a bird?"

Flaherty, the watchman, would soon be around—she thought he might have her pinched. Yet he must have found her by this time if he included the model flat in his hourly inspections. Maria's position grimly amused her.

"I guess I'm the first tenant in this flat all right," she thought. "An' I don't pay no rent."

A FAINT light oozed in through the lace curtains from the few precautionary lamps left burning at infrequent intervals over the aisles of the house furnishings. Maria went into the bedroom and dropped down on the guaranteed genuine curled-hair top mattress. For a long time she lay, nervously anticipating a necessary retreat under the bed; but if Flaherty came he passed. (Continued on page 27)



"Keep your money; I ain't broke yet," she said quite gracefully. Then: "Thanks, Billy; I wouldn't like to take no loan from a gen'leman"

got another yet. I got one promised, though. You take back them things you said—"

"Sure, M'ria, I'll take 'em back all right," cried Billy Keep. "I just didn't get you at first. I was wise you wasn't workin', the way you pulled that 'no hurry' line. It got my goat for a minute. Say, looka here, M'ria, I know you always hated me, but the' wasn't a girl back hom' could shake a stick at you; that's right, see? Let's call it quits, an' I'll slip you a five just for a loan 'til you git your job. No harm in that, huh? You can pay me back any time. I can spare it—"

MARIA QUINN had been in the city long enough to know how to look out for Maria Quinn. She had grown up an independent, defiant little thing, suspicious, hardened to many of the finer impulses, ignorant of others. She had seen too few evidences of human sympathy and unselfishness to accept their existence without a heavy discount. The Greeks bearing gifts would never have gotten by with Maria at the gate.

"Keep your money; I ain't broke yet," she said quite gracefully. She looked narrowly at Billy Keep, and he was apparently only trying to be decent toward her. "Thanks, Billy; I wouldn't like to take no loan from a gen'leman. I don't need it, anyhow."

"Well, I hope you git a job before you go broke," said Billy Keep, solicitously. "You're welcome to the five, but God knows I ain't goin' to crowd it down your neck. Where'd you live?"

"Eighty-seven Buckfield," replied Maria. The number was twenty-odd doors from her own.

"I ain't settled in no boardin' place at the present

Western Football Against Eastern

By Fielding H. Yost

Michigan's famous "Hurry-up" coach, who in the last nineteen years has seen as great a variety of football, East, West, North, and South, as any man that ever lived



IN COACHING, when I work back of a football eleven I like to see it move along, hurry up, get on the jump, and settle down to business.

So without wasting any preliminary time I would like to make one statement early that is beyond any challenging—the Open Game or Western Game in football—that is, the forward passing and running as well as the kicking game—has come to stay, and the team which fails to take advantage of its many possibilities, as so many have in the East, will soon be left far in the rut, forgotten among those who keep marching forward and who keep up to date.

It is neither my business nor my intention to suggest to any Eastern football man how he should build up his system or run his team. But while I was in the East this fall watching Harvard play Yale and the Army meet the Navy, I heard on so many sides and from so many standard sources that the open, or what has been called the Western, system of attack would be utterly useless against a standard Eastern defense that I feel the other side of the matter should be heard just a trifle more at length.

And to any man who is unprejudiced I can prove my contention that we not only have a good game left, but a game in which it is possible to score one or more touchdowns against a very strong defense; also my contention that it is only a question of time before the so-called open game will be as prevalent in the East as it now is in the West. I do not attempt to say which team, East or West, is strongest, but I do believe that any team would be a better team if it were developed to play what has become to be known as the open game along with its rushing game.

The Year of the Hurricane

TO START at the beginning, if you recall the situation, the big hurricane in football came in 1906. The old game was not only ended that season and the new one installed, but the eligibility rules were greatly changed in the big reform movement which swept the country. The playing limit was moved to three years and freshmen were forbidden on varsity teams. In the Middle West these changes went much farther. Freshmen teams in many places were forbidden, football schedules were limited to five games, and many other restrictions were thrown about the game, so that for several seasons Western football was at low ebb, and it has been only in the last few years that it has started back again to its old place.

In those early years, due to extensive changes which the East did not adopt in full, the West was beaten by Eastern elevens. Michigan, for example, in 1907 and in 1908 was overwhelmed by Pennsylvania. But in the last five years of Michigan-Pennsylvania battling, Pennsylvania has won but one contest—that in 1912 where Michigan was leading 21 to 0 when she lost her center and her quarterback, and finally broke into disorganized rout with a shadow team in the field, and lost.

Open Game Demand

BACK to the open game again, the very changes themselves made in overturning old customs, called for a decided change in attack which so many have failed to follow.

In the old game a team had to gain five yards in three downs—one and two-thirds yards to the down; and in the old game to make this distance you could push, pull, or hike the runner along. Even then it was a battle.

In the new game a team has to make ten yards in four downs—or two and one-half yards to the down; and while the distance to be gained is twice as much almost, it must be made without pulling, pushing, or hiking the runner, and with seven men on the line.

Having to gain twice as much ground almost to the rush, without being able to help the runner, what has been added to make up for this big loss? Just one thing—the forward pass. And if the forward pass is impossible or useless, the new game is impossible or useless, except as an exhibition of field-goal kicking by one man. This is a contention that has been often made in the East, but a contention that nevertheless is absurd, as first Notre Dame and then the Army showed the East this last fall.

Yale hasn't scored a touchdown on Harvard in six years, nor on Princeton in three years. Harvard has failed to score a touchdown on Yale in five of her last

six Yale games. The one touchdown that Princeton has scored on Yale in the last four years came from the recovery of a fumble by Sammy White in 1911. This fall in the Harvard-Princeton, Yale-Princeton, Harvard-Yale contests no touchdowns were scored but nine field goals were kicked—six of the nine by Charley Brickley of the Harvard team.

"In the face of these statistics," said an Eastern expert to me after the Harvard-Yale game, "don't you think it has been shown that the touchdown is obsolete, that it can't be scored except by a fluke?"

I don't think so by any means. I saw the Yale-Harvard game, and that was enough to show me that nothing had been proved against the open game or the Western style, for this system had never drawn a chance. Harvard made little attempt to score a touchdown, being content to rely upon the unerring Brickley and to shoot punts over Wilson's head or out of his reach. Yale had little to score a touchdown with except an occasional strong running game that was not varied enough to be a puzzle and was accompanied by no up-to-date forward pass that might be of any avail whatever.

The First Shock

OUT West we have been working on the open game and using the forward pass for some time.

We were handicapped in team building at first, as I said above, by numberless restrictions, but after we had become accustomed to these we soon saw that nothing was to be gained by sticking to the old rushing, piling-up order.

It soon became evident to me that the forward pass, as used by so many leading teams, was of no use when thrown high like a punt. I soon saw that to be effective it had to be handled like a baseball, thrown sharply on a line to the runner moving at good speed, who had to handle it as a second baseman might handle a throw from Sehang or Archer.

A forward pass that is thrown high in the air is absolutely worthless. When you feel that you could run down from the top of the stands and block one, it is fairly certain that a man already on the field could block one even easier. I'll admit this forward pass is useless against any sort of defense, and yet this is the type of pass that has been judged so largely in the East.

Now the Army eleven has always been known for its wonderful defensive work—for its sharp, sure tackling and its general alertness on guard. Yale for years had found it almost impossible to penetrate this Army wall. Strong Navy elevens have failed to score a touch-

down against it for years. And Army experts have told me often that a forward pass would be a joke if attempted against their team. This belief lasted until this last fall when Notre Dame came along from the West with a real collection of forward passes—not the punt imitations that a child could stop. And one gray afternoon on the Hudson, Dorais and Eichenlaub and Rockne of Notre Dame shot so many forward passes against the Army's standard defense that the scorer became dizzy marking up touchdowns. Notre Dame started something like seventeen and something like fourteen landed safely, five scoring touchdowns for 35 points—the largest score ever made against an Army team in all history if I remember correctly.

The Second Shock

IRATHER think the East got its second awakening as to the value of the open game in the Army-Navy contest. The Navy came to New York a top-heavy favorite. It had a veteran eleven back—a big, fast, powerful team with a world of punch. Everyone expected it to win again and to win easily. But by now the Army had found out the value of the forward pass worked the right way. And it had upon its eleven three Western boys, Pritchard, Markoe, and Merrilat from Morningside College in Iowa. The Navy soon got the jump and it looked as if a walk-over would result. And then, all of a sudden, to the immense surprise of the Navy and to the thrill of 45,000 in the stands, Pritchard began shooting those fast, low, accurate passes from thirty to thirty-five yards away to Merrilat and Markoe.

Merrilat missed the first for a touchdown but handled the others, and the Navy's powerful defense was soon absolutely bewildered and crushed as West Point rang up three touchdowns. Merrilat's sixty-five-yard run didn't come direct from a forward pass, but it was the result of other passes as the Navy defense had been driven back and was up in the air, and so was easily caught off guard.

Two Examples

HERE are two specific and standard examples of the value of the forward pass, rightly executed, to the open or running game. Against first the Army—and then the Navy—two first-class Eastern elevens with unusually strong defensive powers, the pass was almost directly responsible for 58 points—for eight touchdowns—an amazing total for only two games when you consider how scarce the touchdown has become in the East of late campaigns.

Here we have a play that scored in two games more touchdowns than Yale, Harvard, and Princeton have scored against each other in five or six years. And no man can tell me that Yale, Harvard, and Princeton are much stronger defensively than the Army or the Navy, because they are not. As I have stated before, the forward pass has made little headway in the East because it has never been given a fair trial. I will explain what I mean by this by showing the difference between the Eastern and Western way of making this pass.

More Like a Punt

IN THE East it is not only made high where it is easy to break up, but it is made generally from a kick formation or from a formation that is easily diagnosed. And once made, from what I have seen and read, entirely too many passes are muffed.

Out West the forward pass has succeeded and proved to be of value, not because Western defensive play was weak compared to that in the East, but because most Western teams not only worked the play far better mechanically but from a greater variety of formations. In place of shooting the pass high, we shoot it like a baseball on a line and the runner catches it like a baseball while moving at full speed. This knack can only be developed by a lot of practice and hard work. A baseball team goes South for six weeks just to practice and train, and a football eleven can't expect to develop any such play as this in two or three weeks' work. For it is a play that requires greater skill than any other play in football and more time to develop.

Now, in addition to making the pass low and accurately, this last season some Western teams used at least ten different formations for making the pass. We would mix up

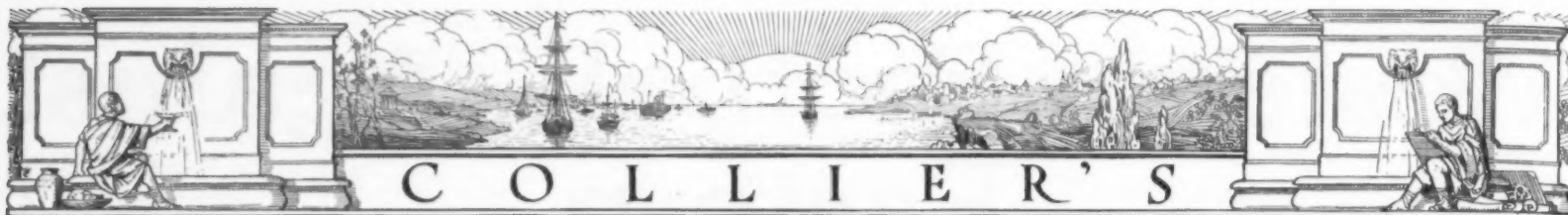
(Concluded on page 26)



Pritchard to Merrilat, Pritchard to Merrilat, etc., ad libitum, ad infinitum.

just by way of practice





A Good American

HORACE VOSE of Rhode Island is dead. For over forty years he raised the best turkeys and every year he sent his most perfect product to the White House—from GRANT'S time to that of WILSON. "Seest thou a man diligent in his business, he shall stand before kings." That is what HORACE VOSE did.

The Six Great Americans

IRVING BACHELLER, who writes popular novels, got up at a dinner and named six great men who had done all the big things accomplished in America since 1850. Those he named were Commodore VANDERBILT, business man; ABRAHAM LINCOLN, statesman; THOMAS A. EDISON, inventor; MARK TWAIN, novelist; HORACE GREELEY, journalist, and WALT WHITMAN, poet.

Do you agree with him or can you name a greater half dozen? What would the United States be like if these men *had* done all the big things since 1850?

A Moral Milestone

IN THIS YEAR OF GRACE an ordinarily hard-bitten, self-seeking business man was telling of a big loss he had suffered by embezzlement. "Why," said the listener, "don't you send that thief to the penitentiary?" Came the answer: "Did you ever see a penitentiary? I wouldn't send any man to prison." Perhaps this business man was not so ordinary as he seemed, but there is no doubt he voiced a kind of sentiment that is growing among Americans, and a curious two-edged blade it is. Human softness, imagination to feel another's woes, these are the very woof of Christian civilization, but the warp is respect for law. Here is another pointer toward prison reform. You must keep your prisons up with the growth of our love for our neighbors, or the whole fabric of the State is weakened by our revulsion against the stupidity and brutality of legal penalties. If you want murder discouraged, it becomes necessary to adjust penalties to the fixed ideas of jurors; if they want hangmen, why let us get busy and find out what is in accord with their consciences in the matter. These things illustrate a high old truth—i. e., it is for the law to keep up with the people's hunger after righteousness; and this means movement, change. Truly, CHESTERTON is right in saying that men must be forever busy throwing away, shoveling overboard, institutions they have made with pains and devotion, only in the course of time to outwear and outgrow them. How proud and pious whole peoples have felt over the prison reform the great HOWARD forced on the early nineteenth century! They were a magnificent advance; now it seems to be up to us to see if we can advance as magnificently.

The "Value" of Corn

IN A RECENT NUMBER we tried to make the point that a short corn crop means less food. The Fort Worth (Tex.) "Record" interprets this as an attack on the farmers because they do not live within the city limits! Now, we are perfectly willing to see the food growers get every proper advantage out of the working of the law of supply and demand. COLLIER'S is disposed to insist that they be not deprived of their hard-earned market prices by various modern systems of food adulteration and of market manipulation. Justice must and will be done in these things. The last proposition we would ever think of urging or even suggesting is that the farmer "cheerfully give to the nonproducing classes the full benefit of all good seasons." This absurdity is the sole product of the Fort Worth "Record" (probably due to mental drought), and we must refuse all credit for it. Our point was and is solely this: That less food means less to eat; that this condition is a national misfortune, and that to gloss it over by talking about "value" is to exhibit that old weakness in thinking which mistakes dollar marks for things. There was once a great deal of this abroad, even in Texas, in the old fiat-money days. As all good Texans cannot be helping Mr. BURLESON run the post office, it is worth while that some of them think clearly, and this rejoinder is printed merely to keep the record straight—if possible. We hardly dare hope that the corn will be acknowledged.

A Famous Phrase Reversed in Practice

FROM TIME IMMEMORIAL our politicians have made a virtue of necessity. It is President WILSON'S rare distinction that in many matters of party and of state he has made a necessity of virtue. "JIM" SMITH, HUERTA, and others are much puzzled and irritated by this queer insistence, but the American people both understand and approve it.

Any Preferences Given?

WE NOTE WITH INTEREST that J. P. MORGAN is said to be concerned with a project for merging London's electric light and power companies. We suggest that inquiring Londoners find out about the record Mr. MORGAN'S firm made in merging railroad, trolley, and steamship lines throughout New England. English investors will find data for thought in the decline of the New York, New Haven & Hartford Railroad's stock from about 200 to 65. This recession was accomplished under the merging and fostering care of these great bankers. Mr. MELLER, Mr. BRANDEIS, and the Interstate Commerce Commission are all on record in these matters.

The Ratio of Success

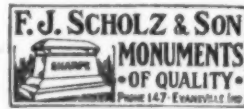
AS AN INTERESTING BY-PRODUCT of the currency discussion there emerges the fact that five of the six executives of New York City's greatest banks are self-made men, born to small things. Five to one is heavy odds, and banking is supposed to be almost the one business where success can be inherited. What is the ratio in other lines where the struggle is more immediate?

But Why Should Hoosiers Die?

SUFFERERS FROM ANY ILL THAT FLESH IS HEIR TO should subscribe to the venerable "Courier," which furnishes light and leading to the town of Evansville, Ind. Whereas most journals subsidized by the Great American Fraud publish advertisements of only a few choice examples of quackery, the "Courier" has them all. Here are some specimen ailments and the "Courier's" sure cures—arranged alphabetically for quick reference:

THE DISEASE	THE REMEDY
Age	Duffy's Malt Whiskey.
Bad blood	Hood's Sarsaparilla, Dr. Williams' Pink Pills.
Catarrh	Kondon's Jelly.
Colds and coughs	Ely's Cream Balm, Pape's Cold Compound, Pinex, Vinol.
Colds or indigestion	Globe Pine Compound.
Consumption	Dr. King's Discovery.
Dandruff and falling hair	Parisian Sage, Danderine.
Diseases of men	Pabst's Okay Specific, Dr. Luckett Company's remedies.
Dyspepsia	Caldwell's Syrup Pepsin.
Epilepsy	Kosine.
Eye troubles	Optona.
Headache	New Life Pills.
Indigestion	Pape's Diapiesin.
Itch	Resinol.
Kidney and bladder complaints	Kilmer's Swamp Root, Croxone, Jad Salts.
Liquor habit	Orrine.
Nerves	Warner's Nervine.
Paleness	Ayer's Sarsaparilla.
Piles (curable at home)	Pyramid.
Rheumatism	Mark Jackson's prescriptions, St. Jacob's Oil, Toris, Warner's Safe Rheumatic Remedy.
Skin diseases	Zemo, Saxo Salve.
Toothache	E-Z Tooth Filler.
Tuberculosis of the glands	Erknan's Alternative.
Ulcers	Bucklen's Arnica Salve.
Women's diseases	Mother's Friend, Lydia E. Pinkham's Pills, Orange Blossom, Dr. Pierce's Favorite Prescription, Cardui.
Worms	Kickapoo.
All diseases	Grove's Tonic.

In justice to the Evansville "Courier," we hasten to add that this little table does not include all the remedies, restoratives, specifics, palliatives, febrifuges, boluses, Galenicals, simples, tinctures, nostrums, cerates, and ptisans for which space is bought in its liberally conducted columns. Old Doc WARNER offers to cure a great many distempers which we forbear to list; the Everywoman Company philanthropically offers to make sylphs of the obese; Menthoeze is, we deduce from the "Courier," good for almost any malady; Wyeth's Sage and Sulphur darkens gray hair so that "no one can tell"—and what shall we say of Foley's wonder—and all the other offers extraordinary young physician. Com- of these concoctions



ful pills and Renwar, doses? Evansville inducements for the paratively few users are killed outright. It takes more than quacksalvers and medicasters to do for some folk. Moreover, there is room for other professions than the doctor's, and when the hardy Hoosier does die, he has to be buried—so that the "Courier" advertises the very best of tombstones. Three cheers for dope!



THE NATIONAL WEEKLY

From One Who Knows

IN THE WASHINGTON STATE REFORMATORY at Monroe they publish a sterling little weekly called "The Index." To a recent issue "No. 1019" contributes some pithy sayings under the heading "What Whisky Will Do." Here are two of them:

Whisky makes a man take the alley, while others take the street.
Scientists claim that whisky deadens the senses and finally kills a man. I say that he is dead from the time it gets a hold on him, and his burial is only a matter of his animal stabilities.

"No. 1019" knows!

The Temple of Wallingford

WE WANT TO BE PROUD of the Panama-Pacific Exposition. That is why we have taken the trouble to denounce two of its "concessions"—that for spectacles (now canceled) and that for the "Temple of Childhood" (not yet canceled). We have regarded these concessions as unworthy excrescences upon a great, a national, project. Let us quote from a Cleveland paper—"Abel's Photographic Weekly"—a friendly exposé written from information furnished by "Temple Director" SAYERS:

Taking away all coverings and verbiage, it is, of course, like all such propositions, intended to make money for its originators and promoters. The plan is a clever one, vastly clever, and the promoters are entitled to all the profit they can make—legitimately. . . . That they draw the long bow very frequently is hardly to be put up against them.

"Vastly clever" is right. We wish there were space here to explain what an extremely valuable asset the originators and promoters can make, not only of the negatives which their "official photographers" turn out "free of charge" to the parents of children "nominated," but also of their monumental "sucker lists." Minor misrepresentations in the "official" correspondence of the "Temple" have been corrected since protest was first voiced—the Director of Concessions noting that this correspondence was "not to the best interests of the exposition" and, "to say the least, misleading." We still dislike the "Temple" proposition, even as amended. The Concession Department at San Francisco should remember that times have changed since the last world exposition was held, and that a different spirit must inform this one. It will no longer do to think of the exposition simply as a pretext for gathering the public's money by as many and as "vastly clever" methods as possible. We heartily agree with the directors' own statement that their exposition is "too large to be made a party to an advertising fake or scheme for the financial betterment of any concessionaire." If the exposition regrets its bargain with the astute "Temple" promoters—as we believe—why should not the directors act as frankly as in the spectacles business? Why not correct their second mistake as they manfully corrected the first? We are like other Americans, including San Franciscans, in wanting to be proud of the Panama-Pacific Exposition. But we can't be till it clears its skirts of the International Child Life Exhibit Company—*alias* the "Temple of Childhood."

"The Hound of Heaven"

IN THESE DAYS when the song of the efficiency engineer is daily heard louder in the land, let us beware of exaggerating his quality at the expense of all else. FRANCIS THOMPSON was perhaps the most "inefficient" human being in Europe. To his dying day he was unable to acquire the slightest regularity in the mere business of living.

His [says his biographer, EVERARD MEYNELL] was a long series of broken trysts—trysts with the sunrise, trysts with Sunday mass, obligatory but impossible; trysts with friends. . . . Dismayed, he would emerge from his room upon a household preparing for dinner when he had lain listening to sounds he thought betokened breakfast.

He probably never earned so much as \$2,000 a year, and had it not been for his friends the MEYNELLS he could hardly have existed even the half a life that was his: he died at forty-seven. Yet he wrote some of the finest poetry in the English tongue, including such a piece of genius as "The Hound of Heaven"—the Odyssey of that divine love (of which human love is an aspect) that pursues us all through life:

So, all things fly thee, for thou fleest Me! . . .
"Rise, clasp my hand, and come!"
Halts by me that footfall:
Is my gloom, after all,
Shade of His hand, outstretched caressingly?
"Ah, fondest, blindest, weakest,
I am He whom thou seekest!
Thou dravest love from thee, who dravest Me!"

What could the efficiency engineer have done for FRANCIS THOMPSON?

"Sheer Weight of Money"

THE ADVERTISEMENT of some articles on "Why Businesses Win" states that the author has given his attention not to the giant corporations which have won by sheer weight of money.

It would be difficult to imply more bad economics, popular untruth, and baseless assumption in fewer words. If "sheer weight of money" could win, the New York, New Haven & Hartford Railroad's recently abandoned policies would have won instead of scoring so disastrous a failure. Weight of money cannot keep the big mistakes going. The smash is merely postponed, as witness the historic failures of Overend, Gurney & Co., Jay Cook & Co., the great copper pool of the later eighties. Where now are the leading dry-goods firms of New York City before the Civil War? They had the custom, the capital, and all else, but of the two biggest stores of to-day one was then a hustling young Philadelphian with a wheelbarrow and the other was an old German out in Vincennes, Ind., and neither "won by sheer weight of money." The plain fact is that behind all commercial forms and means, behind even the most glacier-like aspects of the market, stand the men and women who know, who bend indifferent nature and careless humanity to the purpose in hand, who get the work done. To dodge this fact and blame failure (your own) or success (the other fellow's) on the cash instrument is merely a business version of the old scapegoat fallacy. A fool with a bag of money falls further and hits harder—that's all.

A Victim of Circumstance

A MAN OF VAST WEALTH DIES, and his son, just twenty-one years of age, succeeds him as "head of the family." This young man is presumably one of generous, likable parts; no brighter, no abler, than thousands of boys working for \$15 a week. He is probably decently disposed to go about his daily life of work and play, and mind his own business. But this he cannot do as other youngsters do. It is not probable that he employs a press agent. It is more probable that some space writer has assigned himself the opportunity to help make a living out of this young man's unhappy condition. Almost every day his least movement or doing is chronicled in the press with all the circumstance of a candidate for the Presidency. All the Powers of Foolishness conspire to make him their very own by adoption. The papers print it and people read it. Which is initial, the supply or the demand?

Note on Immigration

IN THE FALL OF 1913 some competitive scholarships for college studies were awarded from a fund established by JOSEPH PULITZER. The winners, in order of merit, bore the following names: BERKOWITZ, BERNSTEIN, FRIEDBERG, MAHLER, EICHLER, RILEY, GOODMAN, LEVINE, SPORN, GORDON, TURRENTINE, ASTRACHAN, and JAFFIN.

Guarding the Girls

"FIFTY THOUSAND GIRLS drop out of sight every year," a famous newspaper announces in huge type. A mere student would ask what percentage this is of all girls between, say, fifteen and twenty years, and whether such loss is possible. The article apparently is based on the fact that 600 girls disappeared in twelve months between New York and Chicago. This is bad enough surely. The remedy recommended is to copy after an English association which publishes protective rules beginning as follows:

1. Girls should never speak to strangers, either men or women, in the street, in shops, in stations, in trains, in lonely country roads, or in places of amusement.
2. Girls should never ask the way of any but officials on duty, such as policemen, railway officials, or postmen.
3. Girls should never loiter or stand about alone in the street, and if accosted by a stranger (whether man or woman) should walk as quickly as possible to the nearest policeman.
4. Girls should never stay to help a woman who apparently faints at their feet in the street, but should immediately call a policeman to her aid.

Possibly these restrictions are colored by the moral overstrain apt to characterize a reformer's zeal, but it is fair to ask whether a land in which they are necessary is either civilized or Christian. Nothing BERNARD SHAW says of English hypocrisy and sensuality is half so striking as this proposal to put everybody in social quarantine. If the facts sustain such contentions, the sooner we have an ironclad etiquette the better. But what a ghastly commentary on our "progress," how our cities sink their pride and become mere traps of lust and death! What is the truth of all this?

COMMENT ON POLITICS

THE most obvious phase of national politics at the present moment is vividly depicted by Mr. Cooper's cartoon on this page—a cartoon which every boy raised on a farm will appreciate. The general public feeling is one of indignation over what was done—and left undone—at the meeting of the Republican National Committee at Washington last month. To abandon a contemplated program of progress, to fail to make any changes in conformity with the spirit of the times, to continue to wish for closed factories and idle business, and to prepare to profit by these conditions represents the lowest depths of political action in this country. The Republican leaders are perfectly willing to adopt what is essentially a degraded position. They personally have no such patriotism as would revolt at this, but they made a mistake in failing to anticipate that the country would be indignant. They reasoned by analogy from 1893 and 1894, when the Republican party profited by a general depression. But these Republican leaders fail to take into account one of the most important phenomena of the times, the spread of economic knowledge. The public is more intelligent about these things than they were twenty years ago, and the day has gone when any party can succeed through windy orations about sunshine and prosperity. A party which tries to give the public empty words instead of principles belongs in the graveyard; and no competent observer will deny that the Republican party is at this moment at the lowest ebb of its existence.

A Hard Winter Ahead

FOR the Republican party the year 1914 is likely to assume the nature of a very long and very cold winter. Between now and the first week of next November thirty-two members of the Senate (one-third of the whole) must be reelected—or be succeeded by others. Of these thirty-two, seventeen are Republicans. Looking over the list, it is difficult to see how very many of these Republicans can be reelected. It is clear that at this moment the Republican and Progressive parties are farther apart than ever. That being so, there will be in every case a Progressive as well as Republican and Democratic candidates. It may very well be that not many Progressives will be

By MARK SULLIVAN

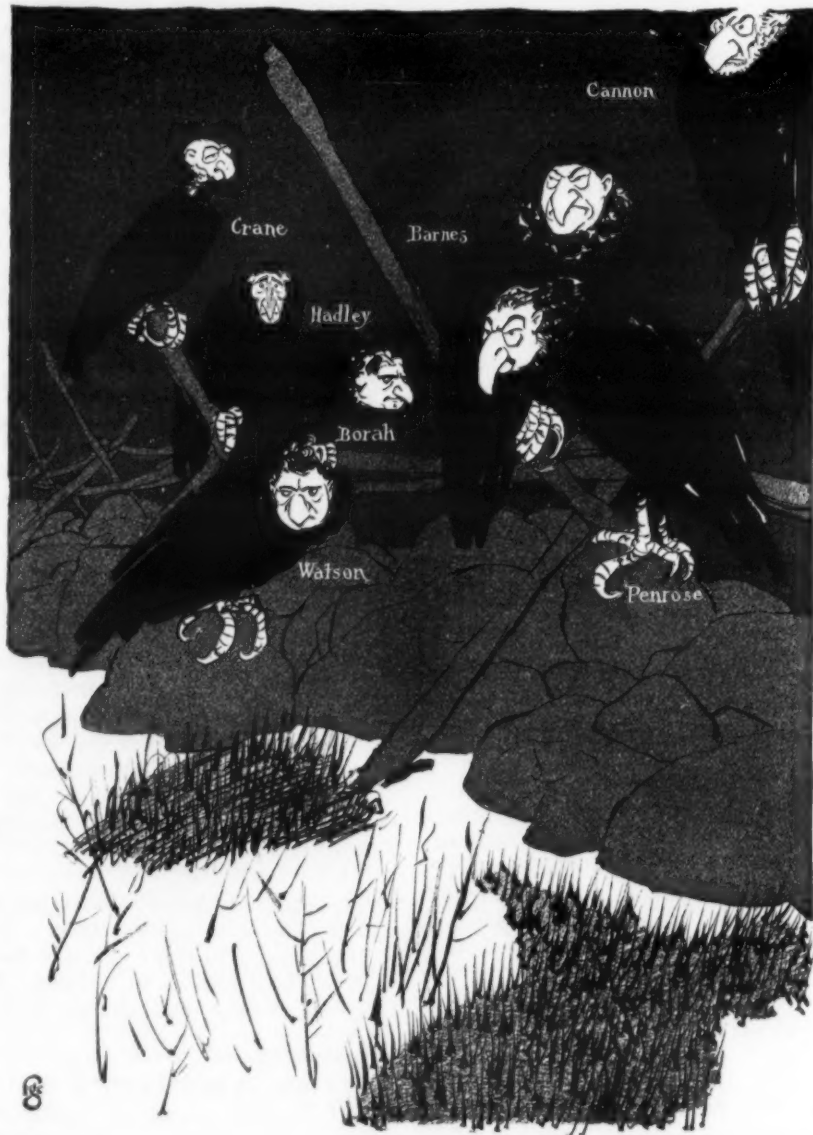
elected either, so that in the end the Democratic party may be expected to increase very decidedly its present majority in the Senate. For example, Senator George C. Perkins of California is one of those whose terms end. It is inconceivable that a Republican can succeed him. Does anybody believe that with both a

little hope of reelection are Stephenson of Wisconsin, Sherman of Illinois, Root of New York, Jones of Washington, Brandegee of Connecticut, and Brady of Idaho. Of the so-called Progressive-Republicans, Crawford of South Dakota, Cummins of Iowa, and Gronna of North Dakota come up for reelection. Another in, roughly, the same position is Senator Joseph L. Bristow of Kansas. He is commonly accepted as a Progressive, but he must decide whether he is going to run this year as a Progressive or as a Republican. The two standpat Republican Senators who may fairly be expected to be succeeded by themselves or other Republicans are Reed Smoot of Utah and Senator Dillingham of Vermont, these two being the only States carried by Taft in the election of 1912. Penrose of Pennsylvania is going to try very hard for reelection, but his hopes must seem slim in a State which was carried by Roosevelt for the Presidency. The membership of the present Senate is composed of fifty-one Democrats, forty-four Republicans, and one Progressive. In the next Senate the number of Republicans is likely to fall below thirty.

A Pause

THE political atmosphere at Washington at the present moment is that of the pause which follows a prolonged period of forced and somewhat feverish activity. Wilson, who supplies all the initiative and most of the energy, is away, resting. Two big pieces of work and several smaller pieces have been completed. Congress is working leisurely

at routine appropriation bills. To a certain extent there is physical exhaustion. For several weeks the Senate, working on the details of the currency bill, was in session from eleven to thirteen hours a day and six days a week. For a body in which the average personnel may be described as elderly, this is trying work. Before the third feature of the President's program—trust legislation—is taken up, there will be a period of marking time to accumulate energy and momentum. Nevertheless the public can safely look forward to Congress sitting more or less continuously for all of the present year. The legislation affecting trusts, when it gets under way, will be long, complicated, and strongly debated on both sides. Indeed, it is one of the hopes of the standpat opponents of this legislation to tire Wilson and the Democratic leaders out.



The Turkey Buzzard Party

From various newspaper accounts of the meeting of the Republican National Committee in Washington last month: "The lever of prosperity has been reversed!" exclaimed Joseph G. Cannon on his arrival at the capital. "Silent wheels, smokeless stacks, and suffering people will speak louder than any declaration of principles that we can make," was the argument of Reed Smoot. "Smokeless chimneys, dinnerless pails, and crowded soup houses were predicted by most of the speakers. "To rely upon mistakes of the Democratic Administration rather than upon new declarations of principles," was the substance of another. Answering those who wished to place the party on record with reference to progress and principle, Sherman Granger of Ohio epitomized the gospel of calamity and standpatism in the words: "Democratic legislation and the conditions we now have in the country—these are your platform."

Progressive and a Democrat running against him Senator Gallinger or any other Republican can be elected from New Hampshire? Other Republican Senators whose terms end and who can have very

Photograph by Brown Bros.



New York City's famous downtown skyscraper district in lower Broadway as it appears after dusk from the top story of the tallest building in the world

Restraining the Overambitious Skyscraper

TAUGHT by time, our cities have learned that some of the prosy facts about skyscrapers are not so agreeable to hear as the poetry. In a score of American municipalities limitation of building height already is in force; and the skyscraper's ambitious climb is forever checked.

Even New York City, where under present regulations it would not be impossible to erect a structure 2,000 feet high on a plot 200 feet square, is on the point of defining and restricting "excessive height." After six months of investigation, a New York municipal advisory commission has just reported that "to build to any height, over any proportion of the lot, for any desired use and in any part of the city, has resulted in injury to real estate and business interests and to the health, safety, and general welfare of the city."

If the recommendations of this commission are accepted and legalized without much delay, the view that appears at the head of this page will represent high-water mark in unregulated skyscraper construction. To take the picture a camera man mounted to the top story of the tallest building in the world and from there photographed the famous lower Broadway skyscraper district as it appears after dusk.

Towers That Exalt the Spirit

THE poetry in such a picture is evident. Many an imagination will be more stirred by this simple print in black and white than by the forms and colors on the canvas of a great painter's masterpiece. The scene is so distinctively American that it appeals to national pride. We seem, with these skyscrapers, to be bidding any other land to match us in courage and skill as builders.

These towers of steel are so lofty that they exalt the spirit like imposing monuments or the beautiful arches of triumph in capitals of Europe.

Much of the recent prose about the skyscraper, however, is in a decidedly less sympathetic vein than the poetry. Capitalists and real estate agents, architects and engineers, firemen and insurance officials, transportation experts and health officers, are contributing to a symposium in which the unregulated construction of towering buildings is condemned on many grounds.

The Skyscraper as a Menace

THAT the skyscraper lowers the rents of smaller adjacent buildings, that it creates cheerless cañonlike streets and deprives its dwarfed neighbors of a fair share of sunlight and fresh air, are the most obvious of the counts involved. Closer study reveals that some of New York's skyscrapers (taking New York as an example, because here the situation is found at its worst) not only rob their neighbors of light and air but themselves as well—lower floors that are undesirable for offices are being rented for storage rooms. Attics downstairs! And on the ground floor street-frontage value is destroyed because space formerly given to shop windows is lost in blank walls required for architectural support. Such facts as these latter contribute of late to make the skyscraper itself pay a most meager return upon the investment. Often it injures its own backers nearly as much as other landholders in the neighborhood.

Edward M. Bassett, chairman of the New York Heights of Building Advisory Committee, remarks upon this point that "some say with much truth that there is an economic limit of height for buildings, and if owners transcend

it they get hurt." Then he asks how, apart from things which ought to impose natural limits on heights, a community can "protect itself against the new experimenter who is determined to put up a building higher yet, or who decides to leave a monument in the form of a high building, or who desires to put up a conspicuous advertisement, charging the loss to his advertising account."

Mr. Bassett lays particular emphasis upon the dangers of increasing congestion of population in skyscraper districts:

"If a hundred more new buildings, the size of the Woolworth and the new Equitable buildings should be erected and filled with tenants, the streets would not hold the traffic, to say nothing of the danger of panic conditions."

"When that day came, the city would have to prohibit anything except very low buildings in the district. This would almost amount to confiscation, but what alternative would there be?"

What a Sudden Panic Would Do

MOREOVER, it is easy to show that congestion perils in the downtown business district in New York are not matters of the far-distant future. A recent count of the number of persons who, in a single business day, passed the corner of Broadway and Fulton Street—at the lowest point in the foreground in our photograph—showed 201,234, or almost enough to populate Portland, Ore., or Denver, Colo.

Already there are a score of business streets in New York that could not, in the event of a panic, hold the populations of the adjacent buildings. If an earthquake or a quick conflagration should suddenly drive the office dwellers in flight into the streets, they would be massed two deep.

CHARLES PHELPS CUSHING.

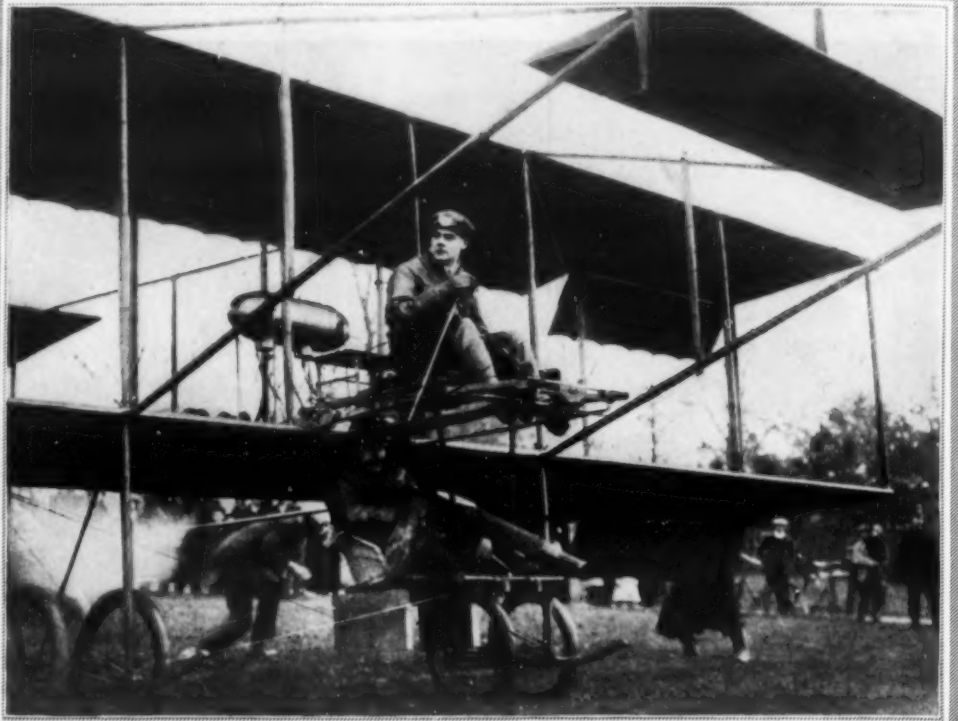


THE TINIEST PAINTING in the world came home to America the other day after half a century of travel in Europe and now is again in the possession of the artist who made it, Samuel T. Schultz, of Wilmington, Del. Our reproduction magnifies it more times than we care to estimate—the original is done upon a grain of corn



A Governor Wins a New Title and More Pay

ALL guessers are agreed that John K. Tener's pay as president of the National League will be much larger than his present salary of \$10,000 a year as Governor of Pennsylvania. Some of the experts declare that he is to be paid even more for experience and judgment than the diamond's costliest players draw for youth and skill. For many years he played professional baseball. Our photograph shows him as a pitcher (in 1889) for Chicago. A good sportsman, Tener. No umpire ever had to put him out of a game.



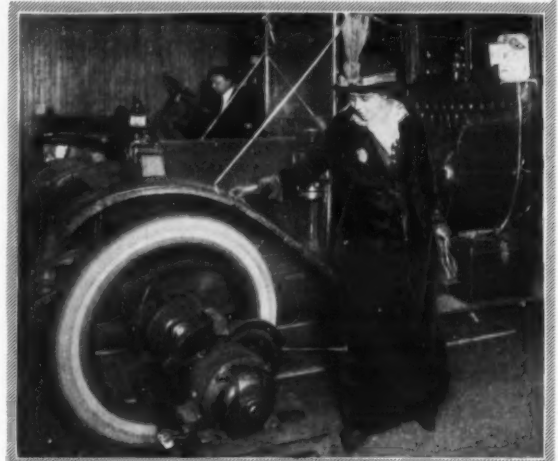
An Invention That Promises a Corps of "Winged Artillery"

THE air, as well as the land, the sea and the waters beneath the sea, now has its artillery. A retired officer of the United States army, Lieutenant Colonel Isaac N. Lewis, has invented a piece light enough to be carried on an aeroplane (26½ pounds), and at the same time possessing "something of the destructiveness of a field gun." In recent tests made at Bisley, England, where the photograph shown above was taken, this new weapon was discharged without appreciable recoil at a normal rapidity of 500 rounds a minute. On the wing, 500 feet above the earth, the gunner hit a ground target about half as large as a tennis court eleven times in fourteen shots. The gun is air-cooled. A net catches the empty cartridges that are ejected into the air.

It is claimed for the invention that it is as effective as a weapon to fire at aeroplanes as to fire from them, but this point is rather difficult to prove. From the ground it may be discharged from the shoulder when pointed upward, or may be fixed upon a tripod like an ordinary machine gun.

So light is the equipment that two guns and a tripod are easily carried by three men; and two guns and 200 pounds of ammunition do not make too heavy a load for a "pony outfit."

The experiments at Bisley were made with a 50-horsepower biplane piloted by Marcus Manton. The gunner was Lieutenant Stellingwerf of the Belgian army.



A Woman Inspector of Motor Cars

FOR valor and persistence in a war on taxicab graft, Miss Sophie Irene Loeb, a New York newspaper writer, has been awarded a gold badge by the State. It reads: "Special Inspector, State Automobile Bureau." Besides the distinction of being the only woman inspector of motor cars, she has a commission to arrest taxicab grafters on sight and to inspect taximeters—as she is doing in the portrait reproduced above. The campaign of publicity started by Miss Loeb reduced taxicab rates in New York City and deprived the hotels of a graft of \$500,000 a year, which they made by renting adjacent curb space to the cab companies.



THE DIVIDING LINE between Fort Rosecrans, San Diego, Cal., and Tia Juana, Mex., appears in this snapshot to be like the realization of a proposal recently made by Senator Ashurst. The Senator introduced a bill in which he asks the Government to appropriate \$350,000 to build a barbed-wire fence along the whole length of the Mexican frontier. This would serve, he said, to check incursions into American territory



T. R. and the Powers of A. B. C.

COLONEL ROOSEVELT has visited the capitals of the three big A. B. C. powers of South America, as they are sometimes called—Argentina, Brazil, and Chile, and little Uruguay as well. At each capital he has been received with great consideration and has delivered addresses before bodies of the country's most representative men. His speeches were submitted to the diplomatic representatives of the various countries in Washington before he left the United States, so that there might be no doubt of their favorable reception, and the only sign of anything like friction was reported from Chile, where Dr. Marchal Martinez, formerly Chilean Minister to Washington, and the ex-President disagreed slightly in their interpretations of the Monroe Doctrine.

Though this photograph shows Colonel Theodore Roosevelt sitting at a Senator's desk, our Gallingers and Penroses have no cause for alarm. The picture is not a prophecy—only a souvenir of the Colonel's visit to Buenos Aires, Argentina.



In a free school for educating servants; a cooking class in session

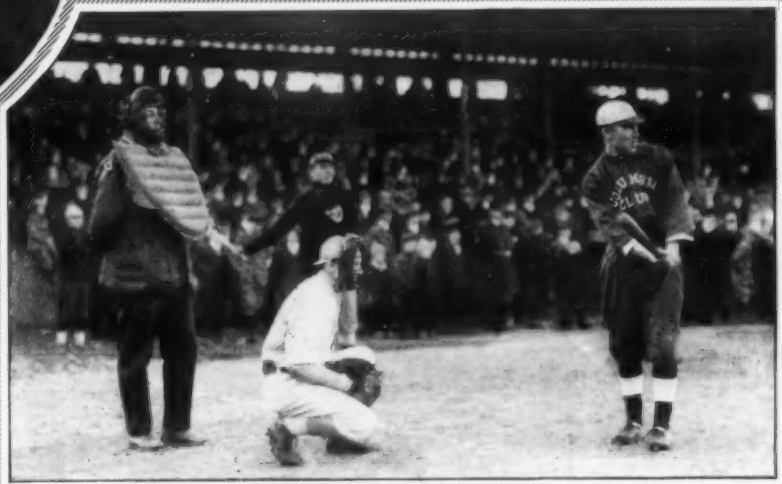
A Training School for Household Servants

OVERWORKED American housewives may deserv a distant gleam of hope in the news that a band of optimists in England has not despaired of finding a remedy for the increasing scarcity of trained household servants. The British contribution is a training school to which girls are apprenticed at fourteen to work two years at a variety of household arts. Our photograph above is a snapshot of a session of one of the kitchen classes. Besides instruction in cooking, there are courses in needlework, dining-room service, washing and ironing, care of babies, hygiene, first aid, household bookkeeping, and singing. Why singing is included is not explained. The school is free to girls of the parish of St. Saviour's, Southwark. Outsiders enter on scholarships or by paying a fee.



When Minnesota Borrowed California's Weather

IN St. Paul, Minn., in mid-December—in that same St. Paul which once celebrated winter with ice palaces—a photographer took these two startlingly unseasonable snapshots: Exhibit A.—"Batter up" in a baseball game, Elks vs. Moose, played in St. Paul December 14. Exhibit B.—A fan who added an extra touch of humor by wearing a straw hat. The Moose won, 14 to 3. The temperature was 50 degrees warmer than on the same date the year before.



Studebaker

"SIX"

ELECTRICALLY STARTED
ELECTRICALLY LIGHTED
SEVEN-PASSENGER

At a price lower
than the price of
any other "Six"
in the world.



“Buy It Because It’s a Studebaker”

Not because of the price-mark—but because of the trade mark plus the price-mark.

Not because of the good looks—but because of the good name plus the good looks.

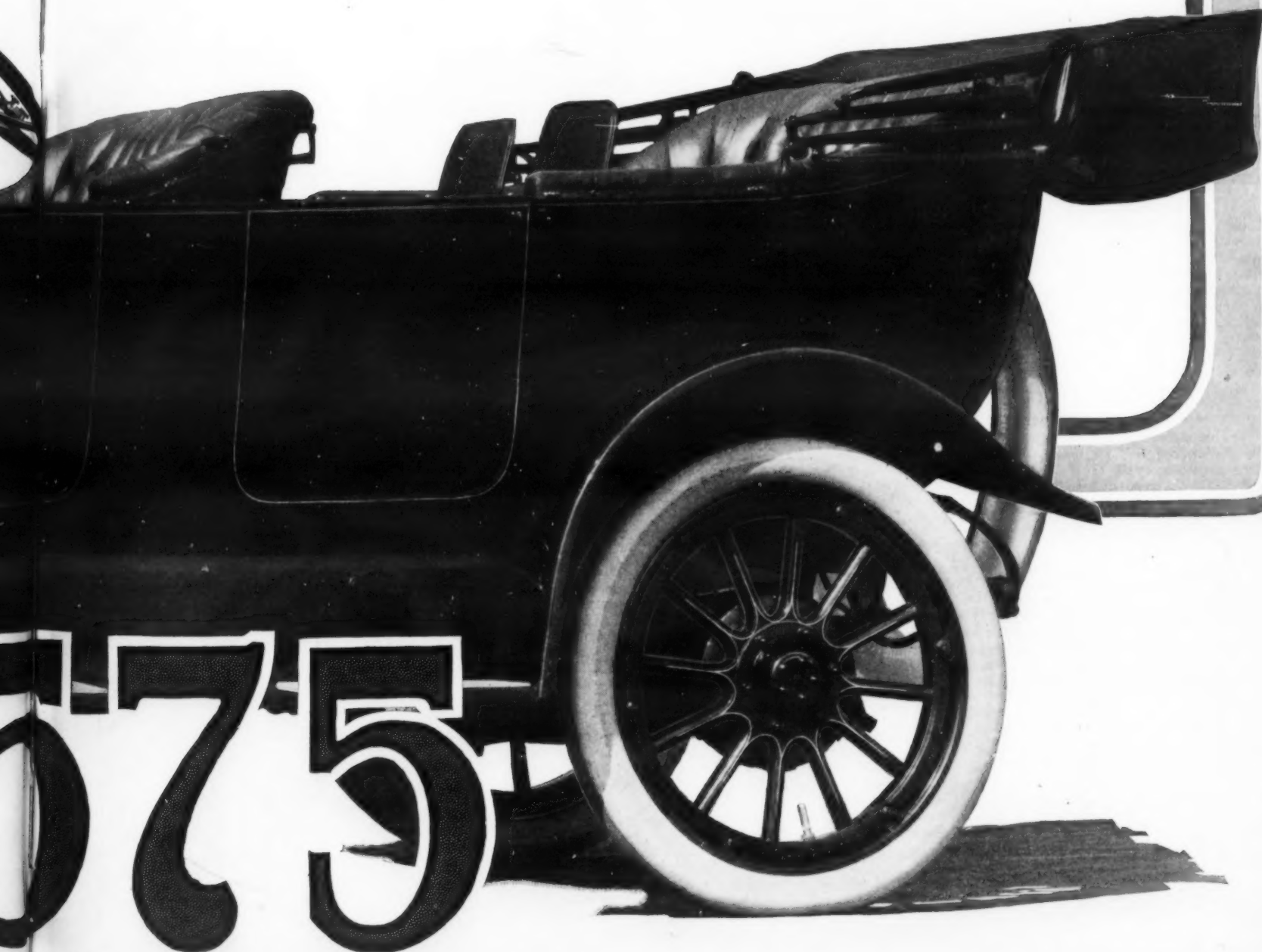
Not because of the outside—but because of the inside, plus the outside.

“FOUR” Touring Car - - -	\$1050
“FOUR” Landau-Roadster - -	\$1200
“SIX” Touring Car - - -	\$1575
“SIX” Landau-Roadster - -	\$1950
“SIX” Sedan - - - - -	\$2250

Studebaker,
Detroit
 Canadian Office, Walkerville, Ont.

In Canada	
“FOUR” Touring Car - - -	\$1375
“FOUR” Landau-Roadster - -	\$1550
“SIX” Touring Car - - -	\$1975
“SIX” Landau-Roadster - -	\$2550
“SIX” Sedan - - - - -	\$2950

This is not an artist's exaggerated conception of the Studebaker “SIX”, but a faithful photographic reproduction of the car itself.



Rash Conclusions

THE time is rapidly approaching when the first official division of American citizens into classes will be made. By March 31 the United States will no longer be peopled by one grade of free and untortured patriots as has been the case since the Declaration of Independence was signed. There will be two legal kinds of Us from now on—the rich and the lucky.

Henceforth a great gulf will divide friends, acquaintances, and families. On one side the happy people will go blithely on through life as usual earning their money, and spending it as nearly simultaneously as possible; on the other side the legal aristocrats will go sorrowfully into the safety-deposit vault, shears in hand, on the first of each month, and after harvesting their regular crop will fill out blanks stating the age, nativity, complexion, political preferences, and religious beliefs of each coupon, together with a confession that they are rich enough to qualify for the income tax.

It will be an exclusive circle, this income-tax class—one which the ordinary wage-earning man cannot hope to enter. Yet there will be no gnashing of teeth on the part of the millions outside the circle. The

gnashing will come from the inside, as large numbers of men make desperate efforts to break from the company of bank presidents, captains of industry, and society leaders, and to escape back to the common herd. That shows just how invincibly

democratic we are in this country.

The Government is sorting us into classes, not from idle curiosity, but in the hope of raising money from those who are best able to stand an extra touch. And it is going about it in a singularly obtuse manner. It will be pleased if it wrenches \$50,000,000 per year without resorting to thumbscrews, whereas it might easily collect five times that amount without wasting any of it in detective fees either.

Why doesn't the Government take one-half the money it is going to spend for blanks and investigators and organize the Sons of Simoleons with a golden ribbon on the coat lapel for a badge, the United States Treasury for a clubhouse, and its membership limited absolutely to those who possess incomes of \$4,000 if married or \$3,000 if single? Why doesn't it define the requirements for getting in instead of those for getting out?

We have heard a good deal of hectic woe over the impositions of the income tax. But would it compare in volume and feeling with the wrath of prominent citizens who had been blackballed by the local lodge of the society when they could prove by affidavit and their books that their incomes exceeded \$10,000 a year?

If the income taxpayers were organized into a society for the purpose of keeping other people out, the membership would double in a year. If in addition the applicants had to walk in a row on the streets tied to a rope and wearing pink portières, the membership would double again and men would go without cigars and shaves in their mad efforts to qualify.

When a wise European government once forbade the use of potatoes, it made them popular. If we make the income tax gang hard enough to get into, men will soon be lying on the other side about their wealth and paying 1 per cent on an income of \$5,000 when they are only earning \$85 a month. Let us double the receipts of the Government by hitting each bondholder a solemn ritualistic swat with a barrel stave while he pays his first tax and giving him a grip and password instead of a receipt.

Cubist Titles Are Also Cubist

THOSE hopeful conservatives in art who believe that Post-Impressionism and Cubism are merely acute instead of chronic must steel themselves to disappointment. This year's exhibitions in London are more earnest and incomprehensible than ever and disciples of the scrambled schools of art who persist in painting only one nose on a face and in otherwise adhering to outworn conventions are being regarded with suspicion by their more advanced comrades. Even those who paint no nose at all are considered to be dodging the issue in a cowardly manner.



By George Fitch

ILLUSTRATED BY C. J. POST

The great improvement noticed in this year's pictures is in the growing ambiguity of the titles. The first Futurists carelessly divulged their ideas in their titles, thus prejudicing the observer. In the famous decomposition entitled "Nude Descending a Staircase in Fragments," for instance, the title severely handicapped the observer, compelling him to see only a nude descending a staircase and sadly restricting his imagination. They do it better this year. Many of the most explosive effects are labeled only "Still Life," "Study," or "Design."

Wrenched Imaginations Will Be Common

THE value of this is obvious. Men have gazed long at Wyndham Lewis's "Design" in this year's crop of cubes and have gone home inspired by the sight of the poor martyr impaled on the picket fence—whereas if Mr. Lewis had been disagreeably insistent upon his own conception he would probably have labeled the painting "Flowers in Spring," or "Wind in the Chimney," and thus robbed it of the nobler inspirations which it creates.

Contrast this generosity with the narrowness of Gino Severini in this same London exhibition. Mr. Severini had two magnificent seizures and labeled the results "Valse" and "Polka." That's all they are. The declaration is flat-footed and final. One cannot dispute the authority, for he is the artist himself. Therefore the ordinary man who sees in these pictures the fragments of a hen who had tampered with an automobile and who might, if allowed, build into this sight a world of romance and excitement must stifle his feelings and wrench his imagination violently around to the artist's viewpoint. Several people have been seriously injured in the effort to do this.

Poverty's Hope

IT IS difficult to overestimate the value of this ambiguity in titles. It perfects the triumph of the new art over the old. A conventional picture is simply an inventory of objects all welded into one inexorable idea. A Futurist painting is as many pictures as there are observers.

Before a single painting one can see at the same time half a dozen worshipers, one sniffing ecstatically at the heliotropes growing on the electric sign, another shivering at the blue snow whirls around the automobile, and a third swelling with patriotism as the British army repels the French charge.

In fact, the new-school pictures are the artistic hope of the man with fierce art passions and a lean purse.

No longer is it necessary to line a home with expensive paintings in order to possess an art gallery. A single Cubist, Futurist, Post-Impressionist, Orfeist, or Paranoist picture with a dozen labels, each representing a different interpretation at a different stage of the owner's digestion, will amply suffice.

Let us have more of the new art. And let us have it unlabeled. There is of course no objection to the artist's keeping a memorandum of what he meant when he painted the picture—moreover, all pictures should be prominently signed at the bottom, thus preventing unscrupulous geniuses from palming off the same canvas year after year as a new conception by

turning it upside down or sideways. But let the title be blind.

The artist, having done the painting, should be content. Let a horde of happy lovers of pied pigments do the interpreting. Or at least let no more value be placed upon the guess of the artist than upon that of his worshiper.

Equal opportunities for all should be the watchword in art as well as in politics.

Superlatives Fail on This Job

THE Panama Canal is now so nearly finished that the steamship companies have had to stop telling us that it will be too late to see it after it is completed and have begun to tell us what a wonderful sight it will be in operation.

And yet no writer of the teeming army which has described it has given us an adequate idea of its size. This is not for lack of figures. It is rather because of figures.

Awed by the size of the job, the writers have stuck to facts. They have told us that the dirt dug from the prism would make a railroad embankment across the country, which fails to impress because few of us have paced off such an embankment with any care.

They have told us that a million barrels of cement, more or less, have been used, which is interesting but not stunning, since few of us have ever seen even a thousand barrels of cement in convention assembled.

They have used plenty of superlatives, but you can't step off and get a good perspective of a superlative.

Our Better Test of Comparatives

WHAT we need in appreciating the Panama Canal is comparatives. Only comparatives, and familiar ones at that, will enable us to size up this great work without closing up our desks and stepping down there to inspect it personally.

The Panama Canal is so long that a tired business man would have to hang eleven hours from a strap in order to go from end to end of it in a street car.

More dirt was removed in digging it than has been left on the streets of Chicago by the last two city administrations.

If the steam shovels used in digging the Culebra Cut were placed in a row, it would cost from five dollars to one hundred dollars to drive by them in a taxicab, depending upon whether it was a London or Chicago machine.

At one time enough men were employed on the work to fill two baseball parks at a post-season game.

The Gatun Locks are so long that a poor golf player would take seven strokes to drive a ball from one end to the other.

Each one of these locks contains more water than the entire New Haven system.

The gates of these great locks are ninety feet high and yet they move twice as easily as the emergency exit doors of a theatre.

The canal cost more money than Tammany Hall could spend in building 1,000 miles of good roads without any auditor at all.

Culebra Cut is so deep that if President Wilson were to stand at the top and offer a good job to eleven thousand Democrats in the bottom, not one would hear him.

There isn't an exaggeration in any of these statements.

If anything they are under the truth. But they fill us with awe even while writing them.



"O H, Phoebe, Phoebe! little Phoebe—my poor little child—my poor little Phoebe," cried Owen, and he tried to lift her in his arms. But she clung frantically to the earth, like a desperate child to its mother's breast. "No, no—no—no—no!" she moaned. "Oh, no—no—no—no—no!"

"Phoebe dear—dear child, I must hurt you, I fear," said Owen, his face convulsed with pity and alarm, "but I must lift you up, dear. I must take you to the house."

At this she ceased struggling, and Owen lifted her in his arms, and felt with another pang how light she was. The little wrist that swayed out over his shoulder looked delicately brittle in its thinness. In her pale fingers were bits of the moss and leaves that she had clutched.

To carry a swooning girl for nearly half a mile, no matter how slight and thin she may be, is a feat that takes strength and endurance of no mean order. He reached Nelson's Gift with the sweat running down his face.

TERRIFIED as he was, he had yet the wisdom to go around with Phoebe to the kitchen instead of bearing her like that into her father's presence. Aunt Patty was not the hysterical type of negro, but a quiet, staid old woman; her worn face had looked on much sorrow, and she was well acquainted with the dark surprises of life.

She laid her hand on Lily's shoulder as the girl opened her lips as if to scream, and said sternly:

"Don't you dar' holler—dis ain't no time for hollerin'—dis is actin' time. You go on up an' set Miss Phoebe's bed ready, an' I'll show Mr. Randolph whar to carry her. Come dis way, suh. We all kin go up de back steps."

They laid Phoebe on her little bed of white wood painted with blue roses, and Aunt Patty stood and smoothed the dark hair from the unconscious forehead, her harsh, toll-roughened palm catching on the silken locks.

"My I'll honey—my po' I'll lamb," she murmured.

"Mrs. Bryce is here, Aunt Patty," Owen told her. "I'll go bring her up."

AS HE left the room Phoebe's redbird flew from the cage, of which the door stood open, and lighted on the foot of the bed.

Aunt Patty looked at it and her brow contracted. "I don't like de sign of birds in sickness," he heard her mutter. "No, I don't."

Jimmy Toots was strutting on the window sill. Now, as if jealous of the redbird, he gave a displeased "caw" and fluttered over beside him.

"Too many birds—too many birds," crooned Aunt Patty, and she said "shoo" and shook her apron at him. King Reddy flew to the mirror, but Jimmy Toots, ruffling all his feathers forward, merely scratched his ear leisurely, then stretching one leg far out behind him drew it up under his sooty down, and, resting upon the other, remained imperturbably where he was.

Owen went to the door of the drawing room and asked Mr. Nelson if he would excuse Sally for a moment—that Phoebe wished to see her. The old gentleman expressed himself as most grateful to Owen for finding Phoebe and bringing her safely home.

"She will fetch some Madeira and thin biscuit for us now," he ended in a pleased voice. "My daughter is a thrifty little housekeeper, and not even Patty is allowed to use her keys."

Sally came out and gazed up at Owen with a white face.

"Phoebe is very ill," he said. "I found her in the wood in a dreadful state. She is unconscious."

World's-End

Chapter VII—Hearts Adrift

By Amélie Rives
(Princess Troubetzkoy)

ILLUSTRATED BY ALONZO KIMBALL



"No, Sally, I am holding you very lightly. But you must clear things for me. Why are you staying here to-night? Why are you willing to take such a grave responsibility?"

You had better go up at once. When I've broken it to the old man I'll take The Clown and go for Patton."

"Wait!" cried Sally, and her thin fingers dug into his arm.

"Wait? Why?" he asked, startled.

SALLY tried to speak, and a harsh croak came from her lips. She gave a sort of hysterical laugh. "It's—it's—the shock. Is she delirious?" she asked, stammering.

"No—unconscious. But a doctor—"

"Let me see her first. She has a horror of doctors. Don't you remember? Her father said so. Any shock now—any shock I mean— It would be terribly dangerous to give her any shock. I'll see her first."

And Sally rushed off up the winding stairway of the front hall.

Jimmy Toots was still keeping somber vigil on the bed foot as she entered, and Aunt Patty rocking and crooning with the girl's little dead-looking hand held against her breast.

"Open the shutters—wide!" said Sally in a harsh voice. "Now come help me."

Together they slipped the pillow from under Phoebe's head, opened her bodice, and, cutting the lace of the corset, dragged it from under her. The girl's face, lying there with sightless eyes and little chin pointed toward the whitewashed ceiling, struck to her heart. On the pale lips was that little stiffened smile of a dying marmoset.

Sally took a towel and, wetting it, struck it sharply on Phoebe's cheeks and temples. After a minute or two Phoebe gave a long, faint moan and half opened her eyes. Quick as thought Sally bent close to her, her fingers on the pulse, which was beating thinly but regularly.

"You're safe," she said; "I'm with you. I'm going to keep you safe."

"You're safe," she said; "I'm with you. I'm going to keep you safe."

THE girl wearily closed her eyes and turned away her face.

Sally had great nervous strength, and she propped the limp body up in her arms and held it against her while Aunt Patty brought the plain little nainsook nightgown. Together again the knotted black hands and the thin sawn ones clothed the girl in the fresh garment and, drawing back the sheet, laid her in her bed.

"I must plait this or it will have to be cut off," said Sally. "Hold her head steady on the pillow while I comb it out."

She was assured now that Phoebe was in no danger of her life. She had merely been in a long swoon of utter exhaustion, brought on by her condition and the horrible shock of that morning.

She combed and braided the bright hair.

As she was finishing Jimmy Toots flew suddenly at her, and, giving her hand a sharp dig with his beak, beat his wings against her arm. She almost shrieked with the uncanny fright of it. There was a little blood drop on her hand where his beak had struck.

"Oh, drive him out! Drive him away!" she cried to Aunt Patty.

AUNT PATTY, advancing cautiously from behind, threw her apron over the crow and transferred him to his cage of osier, which stood near the window.

"Dat's Satan's own bird," said she; "but he sho' love my baby. He thought you was harmin' her."

"Stay by her," whispered

Sally, and ran downstairs to Owen.

"There's no need of a doctor," she said as he came out into the hall, hearing her step. "It's only a faint—the poor child's dreadfully run down. I'm going to stay all night. When I asked if she wouldn't see the doctor she nearly went off into another swoon. Take The Clown and tell Mirabel to send me a bag with night things in it."

Here Mr. Nelson joined them, his thin face drawn with apprehension.

Sally rapidly repeated what she had said to Owen. The old man looked overwhelmed when she stated that she was going to remain at Nelson's Gift for the night.

"My dear madam," he said, taking her hand in both of his own, "how can I thank you? If you had seen my little Phoebe more than once or twice it would be love for her that moved you, but, as it is, only the rarest, most generous kindness of heart can prompt such an unselfish action."

She thought that Owen was looking at her rather strangely. He suggested once more having Charles

Patton in case of any unforeseen developments, and this time it was all that Sally could do to control the natural irritability of her temper. But finally it was decided that for the present Patton should not be sent for.

"Phoebe seems indeed to have an almost morbid dislike of the idea," said her father. "I agree with Mrs. Bryce that, as there is no danger at present, we had better not run the risk of agitating her unduly by his presence."

"Yes, yes—that is best—I'm sure of it," urged Sally.

And suddenly, with all his faculty of intuition, Owen felt convinced that there was something hidden and sinister in this strange eagerness of Sally to prevent a doctor from coming to Nelson's Gift that night.

He turned silently and went out to mount The Clown, a dark confusion of doubt, foreboding, grief, formless suspicion whirling through his mind.

THROUGH the eerie half light of the retreating storm, under wild witch locks of raveled cloud, Owen rode fast toward World's-End. Always Phoebe's heart-rent moaning and her one wild cry rang in his ears. The mere memory of that desolate cry shook his heart again. And he recalled the fragile lightness of her body when he had lifted her, and the touching helplessness of her little head against his arm, and that thin, pale wrist swaying loose so pitifully. Phoebe!—little Phoebe—so laughter-loving, so childlike in many ways—whence had she drawn the source of such a grief? What tragically had breathed on her, blighting her bright carelessness? And Sally! How strangely Sally had acted! How her thin fingers had gripped his arm! It was because she did not wish him to go for a doctor that she had gripped his arm like that. Why? Why? There was something here hidden, dark, unnatural. It was as if Sally were in a plot with some one—were plotting to hide some fearful thing—and from him. He could not order his thoughts. They broke on him from all sides, like evil creatures thrusting heads and stings from crevices in an impassable wall. The only thing that he felt clearly was the presence of something horrible and dark under the thick surface into which he could not see. Again and again Phoebe's face came

before him as it had looked, stark and unconscious against his arm—the sightless eyes, the little teeth just showing piteously between the parted lips. Again and again he heard the moaning, so desolate, so long-drawn-out, low and spent, as of some small woodland thing caught in a spring. But what—what could have brought her to this desperate pass? And not to have a doctor. Somehow he could not bring himself to believe that Sally really thought a doctor should not be sent for. But then, in that case, she had some reason. What could be her reason? Since Phoebe was ill enough to make her think it necessary to spend the night at Nelson's Gift—why not a doctor? And why should Sally care so much about her when she had only seen her once or twice? Yes, "once or twice," was what the old man had said. Sally was not impulsive or given to sudden affections. Now she would stay all night with a girl that she scarcely knew. Besides, she had said that Phoebe was not really ill. Yet she was going to spend the night watching by her.

And more and more that feeling, as of something sinister and fateful, waiting to spring, grew and darkened the horizon of his mind; closed upon him in a smothering cloud of obscure dread, of peril half surmised, of doubt, of pain, of a sort of underimpulse of anger, which made him wish to take Sally's arms and turn her so that she must face him, and compel her to give him the true reason for her strange conduct.

He rode back to Nelson's Gift with his mood in no way lightened, and went up himself to give Sally what he had brought her.

She wished to take the bag through the half-open door, but Owen said: "No, please—I wish to see you."

THEN she came out, hurriedly closing the door behind her. She was still very pale, and her eyes looked deeper sunken in their dusky hollows. "What is it, Owen? Please don't keep me." He looked straight into those restless eyes. "Why are you so bent on not having Patton, Sally?" She seemed to him to hold her breath for an instant. Then she said quietly: "You heard what the girl's own father said."

"Yes—but why do you wish it?"

"I think that is self-evident."

"I do not think so," said Owen.

"Please give me my things, Owen. Phoebe is quieter when I am beside her."

"Why should she be quieter when you are beside her? You are almost a stranger to her."

"I can't discuss that at a time like this, Owen. If you will not give me the bag, I must go back without it."

Owen took her gently by the arm.

"There is something here I don't understand," he said. "You must explain it to me, Sally."

"You are acting very strangely at a time like this. Please let me go. You are hurting my arm."

"No, Sally. I am holding you very lightly. But you must clear things for me. Why are you staying here to-night? Why are you willing to take such a grave responsibility? To lead that old man into thinking that a doctor isn't needed? If anything dreadful should happen—"

TRY as she might, Sally could not restrain the shudder that ran through her at these words.

"I must know what is back of all this," said Owen, and his face, that she only knew as kindly and pleasantly ironical, was hard as flint.

"If you will let me go now, Owen, I will come down later and talk with you."

"You promise?"

"Yes." Then he released her arm, but when she had disappeared into Phoebe's room, he stood for some moments longer gazing at the closed door, with brows drawn down and lips set.

When he went back to the library, he found Mr. Nelson leaning on a Malacca stick by the window. He turned as Owen entered and his face brightened.

"Patty has just brought me word that Phoebe is much better," he said, "and now I am doubly glad to see that you are safely returned. The sky looks very ominous. I have been fearing that we might have a cloudburst such as kept Mr. Bryce here for the night, about the first of May."

Owen, who was walking toward him, stopped short, then moved forward again. (Continued on page 23)

Love's Water Test

By Charles N. Sims

ILLUSTRATED BY EDWARD L. CHASE

MR. LAFE NEFF hurried out of the Lockport post office with all the normal vigor of well-preserved middle age and brought up short at the curb in front. He set about opening

his mail with the feverish haste of an expectant child. The first piece, a box, contained sample pills. Lafe took one, liked it, took another, and then read the elaborate directions curiously. He was so busily engaged in learning what the pills were for that he failed to look up when a lady brushed past.

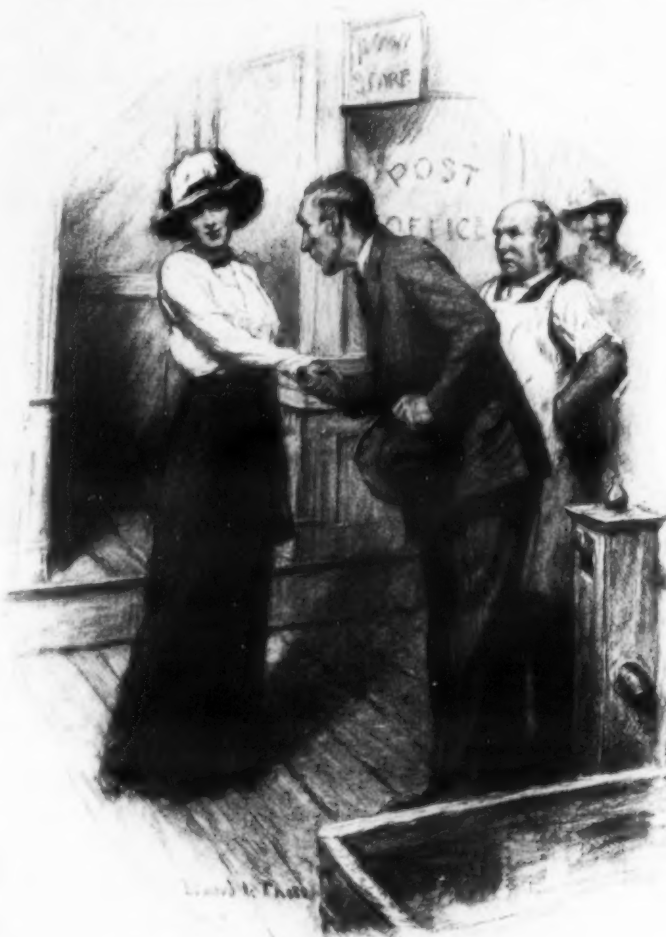
As she vanished within the office, the door of Amos Welker's bakery crept open by inches, and a round bald head was thrust cautiously into view. Apparently satisfied with the result of his reconnaissance, the plump proprietor sidled sheepishly across the street, where he found his friend and fellow boarder lost in a hat full of patent-medicine advertisements.

"Hello, Lafe," Amos sang out in noisy good humor, "you must have had an awful restless night of it. I never saw you lookin' so poorly as you did at breakfast." While he talked he kept an eye on the post-office door. Lafe nodded gratefully and expanded like a shedding colt under a currycomb. "I s'pose I'm as high well as I'll ever be," he sighed contentedly.

"How's your toothache, Amos?" he returned dutifully. "Heard you a-growlin' the after-part of the night."

"Pain's 'bout gone," said Amos, fingering a slight swelling on his jaw gingerly. "Them bags of hot salt Mrs. Wirt made me put on it would have plumb cured it by this time if I'd left the maple sirup off this mornin', but nobody could let it alone," he complained.

"I wish I had your robustness, Amos"—Lafe tried to say it enviously. Amos regarded his rotund front, swelling substantially beneath a cloud-white apron, with a new satisfaction. "I've never missed a meal in my life," he declared proudly; "and if I had a part of my hair back," he went on, again darting a surreptitious glance over his friend's shoulder at the post-office door, "I'd look as spry as I'm feelin'." The opening of the door cut short Lafe's reply, and Amos's moon-round visage overspread with a pink blush of pleasure that made Lafe turn quickly. A tall, wiry lady, not dangerously young, but radiating a vitality acquired through liberal doses of fresh air and judicious exercise, was coming straight across the side-



Amos did not approve of the ravenous manner in which Lafe pounced on Miss Blickenstaff's hand, and it seemed to him Lafe was permitted to retain it overlong

walk to where they stood. There was a smile on her lips and elasticity in her stride. Lafe's bachelor heart astonished him by pounding against his ribs like a trapped barn owl in a corn crib, and he wondered who she was. "Good morning, Miss Blickenstaff," Amos fluttered self-consciously.

"Hello, Amos," she returned his polite greeting with bewitching familiarity; "how do you feel after your two-mile spin on the towpath road this morning?"

"Fine," enthused Amos. "How do you like Lockport by this time?" He endeavored to change the subject and glanced uneasily at the mystified Lafe.

Miss Blickenstaff knit her brows dubiously. "But don't you feel a bit sore in your lower limbs?" she puzzled.

"Not a bit," he assured her with forced lightness. "I'm as limber as a dishrag. I hope it'll clear up for good an' won't rain any more," he added irrelevantly.

"Do you miss your breakfast much?" pressed Miss Blickenstaff.

"Never thought of it till this very minute," he laughed nervously. "It's a fine day," he observed loudly.

"And the cold bath in the river?" persisted the lady.

"Took it before daylight. I hated to come out."

LAFE'S childing eyes settled on the averted countenance of his friend in positive horror. "Amos Welker!" he broke out severely. "I'm downright surprised to hear"—and he stopped short in confused obedience to Amos's covert signal of distress—"to hear," he continued lamely, "of such doings, and you with the toothache, too. When did you start?" he asked with irrepressible skepticism.

"Before you was up," winked Amos. "That bath and run made me feel fine."

"You really should tell your friend how much such exercises do to sweeten life," Miss Blickenstaff said pointedly with a sidelong glance at Lafe, who had been staring at her from time to time, with round eyes full of frank admiration.

"This here's Lafe Neff, another old bachelor," Amos explained gayly. "He and me has boarded at the widow Wirt's for ten year hand runnin'." Amos did not approve of the ravenous manner

in which Lafe pounced on Miss Blickenstaff's hand, and it seemed to him Lafe was permitted to retain it a trifle overlong. "Bachelors lead very carefree lives, I fear," Miss Blickenstaff soliloquized whimsically.

"Every time I meet a handsome single lady," Lafe retorted gallantly, "I can see what I've missed."

"Are you interested in physical culture, Mr. Neff?" She had colored charmingly.

Lafe nodded gravely. "Deeply," he said earnestly, "but I've always been too sick—too healthy," he corrected himself hastily, "to make much of a start."

MISS BLICKENSTAFF beamed her delight at making a new acquaintance who shared her interest in a hard-riden hobby. "It would be good for you," she said oracularly, "even if you don't look like one of those silly people who are always rushing to the doctor for medicine."

Lafe slipped the nostrum pamphlets hurriedly out of sight and studiously avoided Amos's eyes.

"Medicine," he laughed derisively; "I'd be in my grave this minute if I'd took it half the times Mrs. Wirt and Amos wanted me to."

Miss Blickenstaff's eyebrows went up and she shook a pink finger vivaciously at the dumfounded baker. "It's really very much more naughty to advise others to take barbarous potions than to dose oneself," she reproved with a severity not all playful.

"But, Amos," she continued with a certain sweet briskness, "if you will bring Mr. Neff around next Thursday evening I'll give him the fundamental rudiments of physical culture. You'll come, won't you, Mr. Neff?" she asked modestly, turning to go.

"Or die," Lafe promised steadfastly. With a nod and a smile Miss Blickenstaff was off up the street, her sensible heels biting noisily into the board walk as she went.

THE two men watched her in silence until her long, manlike strides whisked her out of sight around the next corner. Amos turned on Lafe in righteous indignation. "Lafe, what made you lie to her about your health like that—you that always took such pride in bein' sick?"

"I don't rightly know," asserted the perplexed but recriminating Lafe, "less it were her bein' her and your settin' me a pattern by lyin' to her about takin' all them runs and baths and goin' without your breakfast. You hadn't ort to do it, Amos," he indicted reproachfully.

Amos's eyes narrowed combatively. "She'd never speak to me again," he declared bitterly, "if she knowed I'd introduced her to a medicine fiend."

"I'll never tell her," Lafe promised consolingly. "Where did she come from, Amos?"

"Ohio," Amos answered gruffly. "She's rented Mike Burk's house and come to Lockport last week to live. What do you want to know for?" he inquired jealously.

"So as I can call on her like I said I would; besides, anybody could see she's crazy to have me."

"You won't like her company when you come to know her like I do," Amos temporized in alarm.

"I'll chance it," Lafe said soberly. "There's no tellin' how much she'll git to carin' about me when I once gives her any encouragement."

"Look here, Lafe Neff," Amos broke out in frank exasperation, "what on earth do you want to spoil my chances with Chestine Blickenstaff for?"

"I can't help bein' a handsome man than you, can I?" Lafe defended in a hurt voice. Amos fairly snorted. Controlling a mighty impulse to knead Lafe on the spot like a batch of stubborn dough, he swung on his heel without another word and recrossed the street, where he slammed the screen door of his bakery viciously behind him.

For fully five days Amos went about his shop with a glazed eye and the brooding brow of a confirmed anarchist, bent on mischief.

THOUGH the two rivals remained on speaking terms, a decided coolness that piqued their landlady's curiosity sprang up between them. Amos's mind moved slowly, but it had this commendable virtue, it moved in a straight line always.

On Thursday afternoon the stern lines around his mouth changed direction and his frown of puzzled concentration suddenly became one of dubious wonder.

After a little he smiled, and pretty soon a plan to vanquish Lafe at a single thrust seemed so glaringly feasible that he laughed until tears of merri-

ment rolled down his cheeks like dewdrops off a tin roof. At six o'clock he closed his bakery and hustled back to his boarding house in high spirits. He entered the back yard by the side gate and approached the cistern pump to prepare for supper. To one side of the cistern platform, under the low-branched plum trees, stood Lafe's newly finished skiff, ready for launching. She was a beautiful piece of workmanship, all white, with bright green trimmings well set off by her name done in glossy black letters two inches high.

Amos glanced idly at the freshly painted name plate and found breathing difficult. In place of the *Wabash Girl*, that had decorated her prow the day before, he now read, in growing perturbation, the



Miss Blickenstaff's hands moved tremulously, and Amos, saying nothing more, dropped over the low balcony rail into the water

Chestine. Within the house more disturbing news awaited him. Lafe had eaten an early supper and gone out "all slicked up"; Mrs. Wirt didn't know where, nor would Amos help her.

THOUGH he skipped through supper and dressed in record-breaking time, the shadows of twilight were fast deepening when he paused, perspiring, before a pretty cottage on the outskirts of the village. From the little front porch, screened in by friendly vines, his jealous ear caught the familiar tones of Lafe's voice, coolly intermingling in gay repartee with the lighter birdlike notes of Miss Blickenstaff's seductive soprano. Amos clenched his hands and indulged his rioting passion in a smile of savage exultation. Still smiling grimly, he removed the collar-protecting handkerchief from around his neck and used it to brighten up his dusty shoes, careful to keep one corner fresh and clean to drape artistically from his outside breast pocket.

Amos finished a last inspection of his apparel, inhaled a deep breath of resolution, and sauntered leisurely up the board walk to the house.

"Good evening, Mr. Welker," Miss Blickenstaff met her new guest with chilling hospitality. "I didn't expect to see you up here to-night after your terrible experience this morning," she remarked significantly. "How do you feel?" she added punctiliously.

"Fine, Chestine. I—" began the puzzled man when Miss Blickenstaff interrupted sharply.

"Miss Blickenstaff, please," she corrected him frigidly.

"I couldn't have stayed away if I'd wanted to,"

Amos concluded dispiritedly, his prepared gallantry falling rather flat even on his own ear.

"Do you ache much?" queried Lafe from the lazy depths of a veranda chair. The subtle change in Miss Blickenstaff cut Amos like a knife. He placed the blame with Lafe and braced himself for the latter's annihilation.

"Why, hello there, Lafe!" he cried amiably. "How is your a-pants-a-sight-us, your old stomach troubles, and your rheumatism? I'm half feared you'll catch your death of cold out here in the night air—you've been allin' so long," he said anxiously.

"Much obliged, Amos," Lafe returned gratefully, "but I ain't had a single twinge of pain since we first commenced to take them two-mile runs and let up on eatin' breakfast. I wouldn't quit them cold baths we've had every mornin' fore daylight fer no amount of money."

AT FIRST Amos refused to believe his own ears, but with a closer inspection of Lafe's placid face he sank weakly on the top step.

"I never dreamed," Miss Blickenstaff broke in with feeling emphasis, "that chronic invalids like Mr. Neff could be so brave in hiding their ill health, until I wormed out of him that he has been a patient sufferer for years without hope of permanent recovery, until—well—he hired you to let him share the benefits of those physical culture exercises I gave you last week."

"Hired me?" Amos exclaimed blankly.

"I don't begrudge you them five dollars," Lafe said magnanimously, "since the way it's turned out."

"It was a good bargain for you, Mr. Welker," Miss Blickenstaff italicized her opinions heavily. "Mr. Neff was just telling me what an awful battle he had in the river this morning to save you from drowning. If he hadn't got his strength up—"

"Saved me from drownin'—this mornin'!" faltered Amos, whose one field trick was the complete mastery of aquatic feats, while Lafe's feline fear of deep water was proverbial.

"I like to see people show gratitude," Miss Blickenstaff was painfully ironical.

"Is the water all out of your lungs yet, Amos?" worried Lafe.

AMOS groaned; he was literally dumfounded—a result Lafe had confidently counted on.

"You was the hardest man to save I've ever tackled," Lafe confided reminiscently. Miss Blickenstaff clasped her hands and lifted her excited eyes to the porch ceiling. "Oh, fortunate succor in desperate straits!" she exclaimed. "Tell me all about it, Lafe," she subsided softly. "To think you have saved more than one of your fellow beings from a watery grave! You are truly a hero."

"Lookin' at it any way you want to," modestly challenged the hero.

"How thankful many must be to you," Miss Blickenstaff mused with an eye to windward. Lafe shook his head sadly. "Most of 'em proved out ungrateful in the end," he grieved, "and I wouldn't be surprised if some day Amos here didn't deny I saved his life."

The soundness of Lafe's lamentable prediction was written all over the fat baker's indignant face.

"Lafe Neff—" he began in angry accents, carrying the promise of a full and immediate exposure, when Miss Blickenstaff interrupted warmly.

"If he did," she snapped scornfully, "I'd never speak to him again."

"Well," said Lafe, with a covert glance of triumph at his rival, "as I were sayin', Amos were the hardest man to save I've ever tackled."

"Do tell us," petitioned Miss Blickenstaff.

"I wouldn't mind hearin' how it were done myself," sneered Amos, crushed, but ready to rise again, too.

"Them others I saved," Lafe resumed brazenly, "all had some hair at least. I had to dive four times fore I got a holt of Amos where I wanted to. The worst of it were the way he went on when I got him landed and run the water out of him. He cried like a child and swore he'd lead a better life and quit dartin' with every woman he met, just to tell how they carried on afterward. What possessed you to go into water that's over your head when you can't swim a lick, Amos?" Lafe expostulated peevishly.

BEFORE Amos could answer, Miss Blickenstaff broke in, in a hard little voice. "Mr. Welker," she began, "I thought you told me a week ago to-night, sitting where you are sitting right now, that you could swim like a duck."

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"I wouldn't be surprised if I did," he admitted with hopeless irony. "I always thought so till I heard Lafe sayin' different."

"If a man tells one lie," moralized Lafe, "he has to tell a million more to get out of it."

"It is growing rather late, don't you think, Mr. Welker?" suggested Miss Blickenstaff. Amos left his seat reluctantly and stood fumbling his hat awkwardly.

"If you only knewed how immoral your head looked in the moonlight," Lafe said kindly, "you'd put on your hat and go away out of respect for Chestine, even if you don't seem to have any for yourself." Amos hesitated.

"Good evening" — Miss Blickenstaff dismissed him finally. Resourceless, Amos had no choice but to face about and he swayed unsteadily toward the street. His short legs had not taken him out of earshot when he heard Lafe telling Chestine of his new boat and how he had named it for her.

With his quivering upper lip between his locked teeth, he tried to shut out Chestine's little squeal of delight and Lafe's eagerly solicited promise of an early voyage. The wretched man walked on quite unconscious that the weather was changing to harmonize romantically with a lover's blackest mood.

The moon swam behind an ugly canopy of storm clouds, thunder belled above the slumbering valley. Amos was forced to do the last hundred yards of his journey home at a slapping pace through rain that fell in blinding sheets.

Not recognizing Luck when he met her, unconscious of the portentous events looming in the near future, he stamped upstairs, kicked his dripping finery into a corner, and went to bed with murder in his heart. He was still awake when Lafe came home. With the indifference of despair, he listened to the squash of his rival's wet boots on the stair, and heard him tramp, humming, up the hall to his room. But with the old familiar click of a teaspoon against a bottle neck telling him that the archhypocrite was medicating himself as usual, life woke again and he was stirred to the profoundest depth of impotent wrath.

DAYLIGHT was just around the corner when the street door trembled under a volley of knocks. Amos sprang out of bed and thrust his head out of the window. A knot of dripping figures huddled near the doorstep. Their excited talk was punctuated with wild gesticulations. "Who's there?" roared Amos.

"Walter Radibaugh," cried the man at the door. "The river's plumb out of its banks and all 'round Miss Blickenstaff's house. She's screamin' for help, and we're after Lafe Neff's new boat to fetch her off 'fore the house goes down the river."

A shiver of excitement and reviving hope stimulated Amos to instant action. "Don't make any more noise," he whispered down softly, "and I'll be there in a second. Poor old Lafe ain't been very well lately," he waited to explain affec-

tionately, "and I want him to git his sleep out."

Amos did not put on his shoes. Contenting himself with a pair of trousers, he tiptoed downstairs and joined the rescue party. There was enough of them to shoulder the Chestine with ease and they crossed the village at a smart trot.

IT was quite light when they reached the edge of the broad belt of black water that cut off the Blickenstaff home from town, and as it was the only house in danger half the village had collected at the spot to witness the rescue.

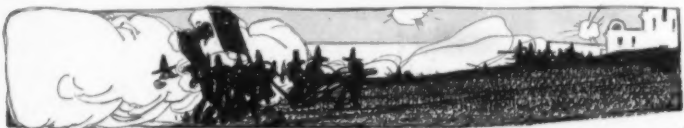


Paths of Glory vs. Parisian Boulevards

By JOHN W. CAREY : : Decorations by RALPH BARTON

REPORTERS sought Porfirio Diaz in Paris the other day to interview him concerning a rumor that he was again to take up the reins in Mexico. The retired dictator was found enjoying his ease and a glass before a boulevard café. "I shall take no further part in Mexican affairs," he assured the press. "I need rest." Though the incident supplied no news "copy," it furnished inspiration for a rhyme:

I halfway understand why men, to fix their names in history, will pal with lions in their den, as Dan'l did in 9 B. C.; why men will face the jaws of death for endless fame to make a bid, defying Hades' scorching breath, as those at Balaklava did; why men will seek the auto park and burn the track and chance the hearse to cut one second from the mark or share a measly little purse; why men will dive on parachutes and risk their lives in forty ways to thrill the nickel show gaboots and on their names in type to gaze; why men will seek the azure vault to pierce in bi- or mono-plane, and do the triple somersault to make the mob their necks to crane. Why men do thus and so, I see, but this one thing I do not know—why any man should seek to be the President of Mexico.



The raging stream was within a foot of the second story veranda where Miss Blickenstaff clung, a thoroughly frightened, disheveled figure. Amos took charge at once. He was on the point of pushing off when Lafe dashed through the crowd and leaped aboard.

"Grab them oars, Amos; that ain't goin' to hurt you," he shouted vindictively. "Do you want to see a lady drown before your eyes?"

Robbed of his thunder, Amos obeyed like an intimidated sailor before the mast, while Lafe remained standing in the stern conning the boat like a dogmatical old sea captain on his own quarter-deck.

"Give way to the right," Lafe thundered on. "Look out for them logs, you old fool! On both oars now, and make for the lee side of the veranda."

UNDER Amos's skilled, guiding hand, the skiff threaded a perilous journey over Miss Blickenstaff's uncharted back yard and bumped into the frail timbers of the second-story balcony. The two men landed.

"Lafe! Lafe! Lafe!" shouted Miss Blickenstaff. The man of the hour walked straight into her open arms with an inflated chest, leaving poor Amos to gnaw his thumb-nails in the background.

Spurned and ignored, he was surprised to find himself calculating the pull of the current toward a lodgment of driftwood, collected in the sullen backwater a hundred yards below the house.

Convinced the artifice would escape detection, he succumbed to temptation,

and gave the Chestine a gentle push with his toe.

"Oh! What a dreadful night," Miss Blickenstaff was sobbing. "I thought nobody was coming to save me," and she hid her eyes on Lafe's coat sleeve.

"I wouldn't 'a' been here now if I'd listened to Amos," Lafe said hotly. "He held it were too dangerous and said we'd ort to hold off till the water went down, and even refused to let me have my own boat till I threatened to swim out. I wish you could have seen his face when I made him git in the boat," declared Lafe. His inventive talent and

sense of humor were fairly running away with him.

At this moment the crowd on shore spied the truant boat securely stuck in the drift and shouted a warning. "Look! the boat," screamed Miss Blickenstaff. Lafe looked and came near falling.

"If Lafe weren't such a fine swimmer I'd say we might as well git ready to die, for the house can't last ten minutes longer," Amos prophesied cheerfully.

Lafe broke out in a cold sweat, but Miss Blickenstaff's face cleared instantly. "Take off all the clothes you want to, Lafe," she bravely told him, though coloring, too; "I don't have to look at you and you got a hero's work to do."

Lafe swept the swirling waters with bloodshot eyes and trembled with horror. He tried to speak, but the words would not come, and he sank back limply.

"It ain't near as long a swim as you had to save me yesterday morning," Amos said encouragingly. "Why, Lafe," he continued admiringly, "I've seen you swim a mile and come out of the water as fresh as a daisy."

"I've got the headache," Lafe protested desperately, "and every time I go swimming in this shape it always makes it worse."

AGNARLED section of a tree bole rammed the house, shaking it to the very foundation. "Help! Murder!" Miss Blickenstaff was losing her nerve.

"My poor head," moaned Lafe; "it's getting worse every minute."

Miss Blickenstaff's hands moved tremulously, and Amos, saying nothing more, dropped over the low balcony rail into the water. Hand over hand he dashed along the surface of the flood like an angry shark. A dozen masterful strokes took him to the boat, and Miss Blickenstaff could not withhold a cry of admiration as she saw him crawl over the Chestine's side without shipping a drop. He was back at the balcony in five minutes and within five more the entire party were safely aboard for terra firma. The color had returned to Lafe's cheeks, but it went away again when he saw the way Miss Blickenstaff was looking at Amos, and he wisely gave up the task of self-vindication.

THE last he saw and heard of his lost love she was smiling at Amos and saying: "I'm going to make a bathing suit right away and have you teach me to swim."

"I don't think we shall have a storm to-night, sir," he said. "Besides, if you don't object, I shall spend the night here in any case. That sofa will make a capital bed."

"I could not think of such a thing as letting you sleep on a leather couch, Mr. Randolph. The room that Mr. Bryce occupied is always kept in readiness for guests." What the old gentleman was really anxious about was supper. Would Patty be able to serve a presentable supper? Were there eggs enough? How would she manage without Phoebe to direct her?

OWEN had been gazing at the door of the closet where Richard's picture of Phoebe was kept. Now as the old gentleman's measured utterance ceased, he started.

"I will do just as you wish, sir, of course," he said.

"Even such small rest as my anxiety about my daughter may leave me," rejoined Mr. Nelson, "would be entirely dispelled were I to think of you as sleeping on a bare couch. But I see that you look toward your nephew's portrait. Would you care to see it again?"

"No," said Owen abruptly. "No—thank you. I agree with you in thinking that it doesn't do Phoebe justice. And what patience she must have had posing for such an elaborate portrait! It must have taken quite a long time."

"Undoubtedly your nephew spent great pains upon it. That the likeness is not more striking is certainly not due to any lack of care on his part. For hours every day he would paint with the most undiminished ardor. On the few occasions that I watched him at his work, I was struck by his great perseverance. I am quite unacquainted with the methods of artists, but it struck me as both singular and praiseworthy that so young a man should so untiringly cover the same surface with different coats of paint. If to take pains is genius, sir, your nephew is certainly a genius."

Owen was standing at the window, staring up at the sky, which was now almost blended with the dark earth. Only some fast-gliding grayish blurs told where clouds were scudding over the black abyss of air. "I hope Richard didn't try your hospitality too far, Mr. Nelson," he said. "He's apt to forget other things where art is concerned."

"On the contrary," said Phoebe's father, "it was a great pleasure to have such an attractive youth at Nelson's Gift. He and Phoebe seemed to be very congenial companions. I believe it was a disappointment to her that he could not finish it this summer. But she told me that important business called him unexpectedly to New York—the day after the storm, if I remember rightly—or no—it was the day after that."

"The first of May I think you said?" "About then—or stay—I recall that it was after Phoebe's birthday—about the second week in May, I think. We missed the young man. He plays chess quite well for a beginner. I won a game from him with considerable difficulty on the evening that he stayed all night with us."

Owen's temples ached with the pressure from his quickened heart. He was like one who has been stunned for a moment, and wakes to the pain of the blow. That intuition of his, swift and sure as a woman's, had leaped to some appalling conclusions during the last few minutes. And yet—and yet—Phoebe!

World's End

(Continued from page 20)

little Phoebe! Those clear, childlike eyes—that lightly laughing mouth—but here Reason stabbed with her cold blade—Juliet had not so passionate a mouth as Phoebe's—Juliet who, from her moonlit balcony, could demand his intentions of her lover as calmly as her lady mother might have done—whether his "bent" were "honorable," his "purpose marriage"! While Phoebe—sickeningly sure was Owen that, shaken by the breath of love, Phoebe would never have paused to question her lover's honor or the worthiness of his intentions.

IF what he feared in that dark glare of revelation cast by the old man's innocent garrulity—if what he shudderingly feared were true—then no baser, more heartless, more cowardly scoundrel lived than his nephew Richard Bryce.

And—as controlling himself by an effort of sheer will, he led the old man to ramble amiably on—he was putting together, link by link, the fragile chain of circumstantial evidence: the night spent at Nelson's Gift nearly two months ago, the sudden departure of Richard within two days after; the lie about "important business"; Phoebe's look that morning when he met her driving from World's End; the news of Richard's sailing for the East, only received by his mother that very day; Sally's eagerness to go again to Nelson's Gift in the afternoon; the anguish of

straight those great black eyes stared before her—how like, how dreadfully like his eyes they were! And how the big jewels in her rings glittered in the drafty candlelight where her hands were clasped together upon her thin knees. Was she praying? Phoebe shivered through all her spent nerves. If she were praying it must be to some evil power, for those black eyes might have been the eyes of Job's wife when she bade him curse God and die.

HIS mother—in her room. His mother, knowing all her shame, ready to protect her in order that he might not suffer. "I must kill myself—I must kill myself—" she thought. "And I must do it surely—I must not be saved—I must not make a mistake."

Feverishly her thoughts quested, seeking the surest way. There was no pistol in the house—laudanum? She might take an overdose, and so fall of her aim. She swam too well to drown herself—she had heard that people who could swim did so in spite of their desire for death the instant that the water was about them. Suddenly her heart checked, then labored painfully. She had thought of it! She had thought of a sure way! In the storeroom was a quart of chloroform kept for emergencies on the farm. She would make a sack of some stout material—then with the quart of chloroform and her bath sponge she would go far into the Mountain Woods—very far—where she could not be found for days. She would soak the sponge in the chloroform, put it in the sack, then lie down

and fasten the sack tightly over her head. "But I must get strong first. I must make her think I will mind all that she says."

And from under heavy lids and thick, short lashes she watched Sally, sitting there so motionless in the little wicker chair, with her black eyes smoldering darkly, and her thin, jeweled fingers clasped on her thin knees.

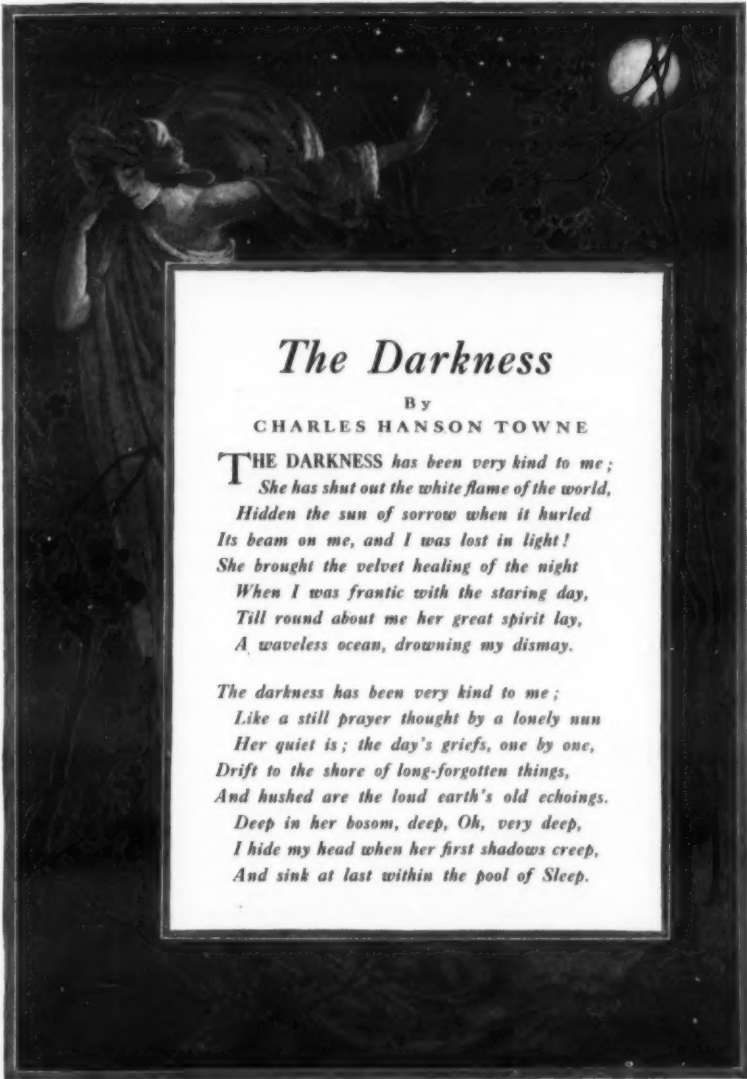
After supper, which to Mr. Nelson's great relief was excellent though plain, the old gentleman pleaded so earnestly to be allowed to see Phoebe, if only a few moments, that Sally told him he might go and sit by her till she came back. If he would not talk to her or let her talk to him. When he had gone upstairs, she turned to her brother, saying:

"Now, Owen," and led the way into the green-paneled room.

SALLY, while she had sat brooding in Phoebe's wicker chair, had determined on her course of action. She knew that the girl's secret would be as safe with Owen as though buried in a depthless sea, and she had decided to tell him that Phoebe had confided her tragic secret to her, and that her lover was a Vir-

ginian whom she had known for some years, and whose name she preferred not to tell, as he had died suddenly, a day or two ago. This would account for Phoebe's despair, and would also prevent Owen from taking steps to discover the man's name and trying to force him to marry Phoebe. But when she found herself alone with Owen, and lifted her eyes with schooled calmness to his face, she found that the hard expression had left it and that he only looked profoundly sad and rather older than usual.

"I've come to explain whatever you think necessary," she said gently. "Thank you, Sally," he replied, "but I've been having a long talk with the old man. Many things have become



The Darkness

By CHARLES HANSON TOWNE

THE DARKNESS has been very kind to me;
She has shut out the white flame of the world,
Hidden the sun of sorrow when it hurled
Its beam on me, and I was lost in light!
She brought the velvet healing of the night
When I was frantic with the staring day,
Till round about me her great spirit lay,
A waveless ocean, drowning my dismay.

The darkness has been very kind to me;
Like a still prayer thought by a lonely nun
Her quiet is; the day's griefs, one by one,
Drift to the shore of long-forgotten things,
And hushed are the loud earth's old echoes.
Deep in her bosom, deep, Oh, very deep,
I hide my head when her first shadows creep,
And sink at last within the pool of Sleep.

Phoebe in the wood; Sally's almost fierce determination not to have a doctor. Like a scroll of some Satanic scripture, unholy and convincing, the facts and their interpretation unrolled before him.

And Phoebe lying white and broken in her bed with its blue-rose garlands, was thinking: "There is no other way—I must get my strength—then I must kill myself."

FROM under heavy lids she watched his mother sitting in her own little wicker chair against the blue denim cushions that she had made herself. How tall and tired and thin she looked, folded deep in her dressing gown of pale blue crape, that made her sallow face seem dusky as an Indian's! How



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clearer to me. I am sorry if I was abrupt just now. My great anxiety and the shock of the whole thing must be my excuse. Mr. Nelson tells me that aversion from doctors comes to Phoebe directly from her mother. It's a singular prejudice to inherit, but such things have no rules—"

HE was not looking at her as he said this, but at Phoebe's gray kitten, which had sprung upon his knee and was playing with the buttons of his waistcoat. Sally thanked God that he had not been looking at her. The blood surged into her face, and she felt her lips twitching in spite of her efforts to control them—so violent was the reaction from the most poignant dread to this unexpected relief. She was silent just long enough to get her voice perfectly under command, then said quietly:

"I think that you will see for yourself to-morrow how much better Phoebe is. She is quite composed now, and very obediently and sweetly drank some milk and wine I mixed for her."

"Yes—she has a lovely nature," said Owen a little hoarsely.

It was natural, he felt, that Sally should wish to keep from him the horror of Richard's act, yet that she should set herself deliberately to deceive him, after all these years of close companionship, cut him to the heart.

"Shall you stay here to-night?" asked Sally, dreading silence.

"Yes, Mr. Nelson has offered to put me up. And if there should be any change for the worse—if you should decide to have a doctor after all, I can get Patton more quickly than a farm hand on some old plug could."

"That's very, very kind of you, Owen. It will be a great comfort to feel that you're in the house."

OWEN laid the squirming kitten on its back in one of his big hands, and stroked its little pear-shaped stomach while it caught his forefinger in both paws and pretended to bite it. "Do you think that I can see Phoebe to-morrow?" he asked, still with his eyes on the kitten.

"I—well—" hesitated Sally. "It might excite her too much. But if she wants to see you—perhaps."

"We're great friends, Phoebe and I," said he, and again his voice was a little hoarse.

"Yes—I think you might see her, as she knows you so well," hurried Sally, anxious to conciliate him in every way possible. "It might divert her from thinking too much of her own—feelings." She had been on the point of saying "troubles," and bit her lip, glancing sharply at him, but the kitten still claimed his attention.

"Thanks. I wish very much to see the child. But don't you think the old gentleman has been with her long enough? Hadn't you better go back now?"

SALLY rose with alacrity, and the brother and sister clasped hands for good night.

"If you need me I shall be in the room at the head of the stairs," said Owen, and as he said this it seemed to Sally that a shadow passed over his face. But the next instant she decided that the strain of the past three or four hours had made her fanciful. All the way upstairs she kept saying in her heart: "Thank God! Thank God!" After all, he was not really suspicious—only upset by the shock. And she had a wild longing to get to some corner quite by herself, where she could ease the stricture in her throat by a fit of weeping.

The next morning, while she was taking her coffee seated by Phoebe's bed, she said to her:

"My child, you had better call me 'Cousin Sally'; it will seem more natural if you are going away with me for a long trip. It will explain our relations clearly."

"Yes, Cousin Sally," said Phoebe obediently.

"And, Phoebe, I want you to try to be as quiet and composed as you can. I am really your friend. I want you to lean on me."

"Yes—thank you, Cousin Sally," said Phoebe. She wished to please, to inspire confidence, so that Sally should not be afraid to leave her to herself, while they were preparing to go away. She dreaded more than anything that Sally should insist on taking her back to World's-End, and so interfere with her plan about the chloroform. But even

that should not stop her. She would kill herself, though to accomplish it she had to leap from the train over some high trestle or embankment on her way to the seaside.

SALLY rose and put down the little tray on which the coffee had been served. Then she came back and seated herself on the low bed, taking Phoebe's hand in both hers. "Listen, my child," she said. "Yes," said Phoebe, looking up at her wearily but submissively.

"I want you to keep this thought before you. It will give you strength. I am determined that Richard shall marry you when he returns from the East. I have a strong will, Phoebe. You can rest assured that Richard will marry you."

"Yes," said Phoebe again, but she was thinking now that no will on earth was so strong as the will in her which had determined that she would die rather than live after the wrong that she had suffered, or become the wife of a man who had treated her as Richard had done. There was no confusion in her feeling toward him. She hated him with a hatred in direct ratio to what had been her passionate love. She hated him so utterly and so bitterly that those black eyes, which resembled his and which looked very kindly at her this morning, were loathsome to her. When Sally touched her with her hot, thin hands, it was by the supremest effort that she restrained herself from shrinking physically.

"Now," said Sally, pleased with the girl's perfect docility, "we understand each other. I feel that we can be good friends. I confess that at first I felt very bitterly toward you, but I hope I'm a just woman. When I had thought things over I saw that the chief wrongdoing was Richard's—though it was a dreadful, dreadful thing to happen, Phoebe—and may ruin Richard's career. Unless, perhaps," she added, looking at the girl keenly, "you will let yourself be guided by me in the future, as you are doing now."

"I am sorry—I will try to please you," said Phoebe.

"Then there may be hope for us all three," said Sally. "It looks black enough now, but there may be hope."

PHOEBE said nothing this time. She looked at Sally's face, which had grown absent and almost forbidding in its dark gravity, and for the first time she wondered: "What does she mean to do with—the child?"

A fierce, new feeling leaped to life in Phoebe. That poor little child would never be born, she hoped, yet if it were to be, through some mischance of fate, did this woman think that she or any other being would have the strength to take it from her?

Under the smooth bedclothes she clenched her hands, with their broad, strong little palms and slight, pointed fingers—while the blood stormed into her white face. Sally noticed the bright flush and, drawing the bedclothes a little higher, said:

"But we're talking too much for your strength. Lie quite still now and try to have a nap." And going over to the window, she seated herself again in the wicker chair, with the portfolio from her dressing bag upon her knees, and began a long letter to Richard, into which she poured some of the pent bitterness that was corroding her. When Sally had returned to Phoebe the night before, Owen settled the old gentleman comfortably with his manuscripts and said that he would have a pipe outside.

HE walked for a long time up and down the little flagged path that divided Phoebe's garden from the lower lawn. In the warm darkness he could hear the regular, crisp, tearing sound of a horse grazing. It was Kildee, who had been turned on the lawn for the night. Owen, who had handled her when a tiny, tiptoe foal, called softly, and with a "quhrrr" of inquiry she ceased grazing—then, after a short sniffing halt, came up to him. He took her gently by the forelock and played with her soft muzzle—Phoebe's horse, care-free and mildly lawless in the summer night, a creature blithely beyond reach of moral questions, while Phoebe herself lay shattered, because unwittingly she had snapped one of the invisible bonds that hold in place a code of ethics. He sighed heavily, releasing the mare, who returned to her grazing, moving slowly as she cropped. And walking to and fro,

his pipe, long smoked out, still between his teeth, Owen pondered with dull pain on the dreadful situation which had been revealed to him.

He had led Sally to believe that his suspicions were allayed, for several reasons; foremost was his determination neither to share nor to discuss Phoebe's pitiful secret with anyone. That he and Sally should sit down calmly to talk over the plight of the young girl seemed to him revolting. And he thought of Phoebe as a poor little prisoner of hope, and Sally as her tolerant but fiercely resolved jailer, risking everything in order to shield the son who had brought dishonor upon her. Somehow it seemed to him pathetic and wretched beyond words that the vivid, willful young creature he remembered should now be merely a bit of broken jetsam in Sally's thin, harsh grasp. And what did Sally intend doing? What were her plans? The child—he shivered in the warm air—the child—little Phoebe's child—what had she planned to do with that? Here was a dreadful question. A something twined with the roots of his being thrilled painfully at the thought that her child might be taken from Phoebe—cast into the convenient deep of anonymity. That, he felt sure, was what Sally would wish to do. But it should never be. Only how to prevent it? How to stand between Phoebe and these terrible consequences without telling Sally that he had divined all? How to shield Phoebe without searing her with the fact of his knowledge? He seemed to be in an *impasse*, black and thick as the night and impenetrable as a jungle. Yet there must be a clue—he would come upon it if only he groped patiently enough.

To and fro he walked, to and fro, and the sound of Killdeer grazing came as regular as heartbeats.

At ten o'clock he returned to the house and lighted the old man's bedroom candle for him, escorting him to his door on the way to his own room.

As he entered the "guest chamber," he stood with his candle held low, looking about him with repulsion. Richard had slept in this room on—that night. He turned with a shudder from the bed with its honeycomb spread and square pillows, and opening wide the shutters, as Richard had done, sat down by the window. The same scent of soap that had harassed Richard stole about him.

He sat frowning, his arms folded gazing out at the downy blackness. As soon as the house was quiet he would go and lie on the sofa in the library. The next morning, about ten o'clock, Sally returned to Phoebe's room after a talk with Owen in the garden. "Owen wants very much to see you, Phoebe. Do you care to see him? Are you strong enough?"

The color rushed into Phoebe's face, then back again, leaving her painfully white. She closed her eyes for a second, and one corner of her mouth trembled.

"Don't trouble if you feel too weak. Owen will understand perfectly," said Sally, relieved to think that the girl would not be able to see him, after all.

Phoebe opened her eyes quickly, and they were bright and scared like the eyes of a bird that one holds, no matter how discreetly, in one's hand—but there was a little timid half smile on her lips, touching in its wistfulness.

"I'd love to see Cousin Owen," she said.

Sally went to fetch him. Owen came quickly, his dark face eager and brimming with tenderness, though he had tried hard to compose it to an ordinary expression on entering. His big figure in his crash riding clothes seemed to fill the little room. When he saw Phoebe's face, so childish and wan, between the bright braids that Sally had plaited afresh that

morning and laid out over the pillow, tears sprang to his eyes in spite of himself. "Little Phoebe—dear child," he said, drawing up a chair and taking the pale little hand that she extended silently in both his big, brown ones.

SALLY had seated herself by the window and was gazing out at Hollybrook Wood. Phoebe lay and smiled at Owen, but her lips quivered so that she could not speak at first. He just sat quietly stroking the slight hand that he held and smiling back at her. "How—how is Wizzy?" she managed finally.

"Wizzy is in fine feather. Would you like him to call on you?"

"Yes," said Phoebe. Somehow Wizzy seemed the only natural, friendly thought that came to her in long, dark ages. "Will you bring him some time, Cousin Owen?"

"This very afternoon, if you like," said Owen. He was wondering why that little peak of soft hair on her lovely forehead should seem to him the most touching thing he had ever looked at. Where the heavy curves turned back from her face there was a little dusting of golden down that lay on her white brow like pollen on a lily leaf. "A child—just a child herself," thought Owen, his heart wrung within him—and he thought of Richard with a throe of rage.

"Sally is going to stay with you another night, and David can bring Wizzy in the trap that fetches her some things that she needs." Did he fancy it, or did Phoebe's slight fingers cling closer to his as he mentioned Sally would stop another night with her? But she only said:

"Yes, Cousin Sally is so kind," and she saw that Sally glanced approvingly at her when she spoke of her as "Cousin Sally" to Owen.

"We must be sure, though, that Jimmy Toots is safely shut up," said Owen. "Wizzy has a terror of Mr. Toots."

"He's in his cage all the time now," said Phoebe—a little sadly, Owen thought. "He was very naughty and bit Cousin Sally. He's very jealous."

"Poor Jimmy!" said Owen. "Where is he?"

"There," said Phoebe, pointing.

"Can't we have him out for a bit, Sally?" asked her brother. "I'll watch him."

"He's really very savage with me, Owen."

"Oh, but he likes me—I'll watch him," said Owen, and, getting up, he released the crow, who, with an exultant caw, flew straight to the foot of Phoebe's bed, fluffed out all his feathers with a vigorous shake, then smoothed himself to a glossy sleekness, and, hopping down, began to walk solemnly up the slender body outlined by the marseilles quilt. He nestled down finally against her cheek, and began to nibble her ear.

"Dear Jimmy," said Phoebe, stroking him. "Dear Jimmy," and then without warning, she began to cry bitterly. "Don't—don't," pleaded Owen, wiping away the tears with his big handkerchief, which almost hid her little face from view.

"Sally won't let me stay if you cry, dear. She won't let me come again. Please, dear, please." Phoebe caught the big, gentle hand and held it tight against her face. She checked her tears by a violent effort, but he felt the brush of her thick lashes against his palm as she blinled away the blinding drops. His heart ached with pity. He would have liked to gather her up against his breast and comfort her as a mother does a child. "I think you'd really better go now, Owen," came Sally's quiet voice from the window.

PHOEBE'S eyes were closed. She made no sign to detain him. "I'll come again to-morrow, dear," he said, rising. "Please," he heard her whisper.

(To be continued next week)



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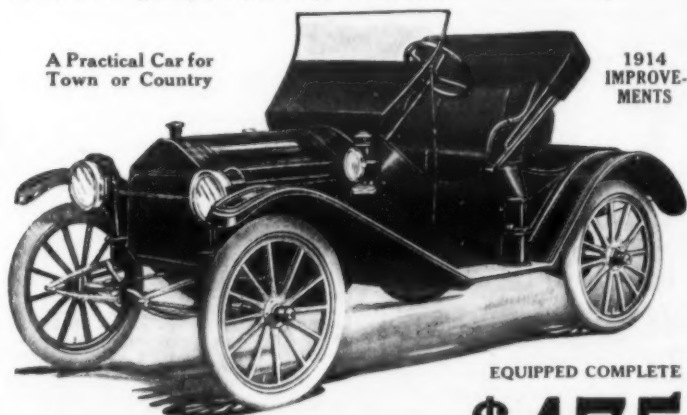
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NEW YORK

Western Football Against Eastern

(Concluded from page 9)

a running play, a kick formation, a shift, and various other systems that worked as a puzzle to the opposing defense. To show the possibilities of the pass, one team that came to play us had a man who gave an exhibition of passing before the contest, throwing the football almost sixty yards on a line!

I grant the contention of the East that any sort of forward pass may be broken up and stopped. But only at the expense of breaking up the defense against the running game. There never was a defense that could stop both the forward passing and the running game at the same time. Give me twelve men on defense against the other team's eleven on attack and I can accomplish this. But not with eleven against eleven.

THE VALUE OF OPEN PLAY

AND therein lies the value of the forward pass. It can be used, not only as an offensive play, but as a threat. One time you can make a forward-pass threat and take up the running game; the next time you can start a running threat and shoot a forward pass. If the defense crowds in and spills the running game, the pass is valuable in driving this defense back. If it falls back, there are wide openings for the running game; if the defense doesn't fall back, the pass is easy to make. For East or West or North or South, no man and no set of men can be in two different places at the same time; no defense can be back and scattered to break up a well-executed pass and up near the line to break up a running game at one and the same moment.

Now as to comparative values: Harvard, with a wonderful back field—considered the greatest in the country—couldn't score a touchdown with her system against Yale or Princeton: Yale, with a big, fast back field in Wilson, Knowles, Guernsey, and Ainsworth, couldn't score a touchdown in either big game. Neither could Princeton. So, if the forward pass is a joke, as they say, what about the system they are using as an offensive test? If the forward pass is a joke, how about Princeton's attacking system which scored one field goal in her three big games against Dartmouth, Yale, and Harvard?

On the other hand, how was Princeton's last touchdown earned against Harvard? By a forward pass in 1912. How was Yale's last touchdown earned against Princeton? By a forward pass in 1910. How was one of Yale's last two touchdowns scored against Harvard? By a forward pass from Veeder to Alcock in 1906. Here we have instances of touchdowns being scored in the East, nearly all of the touchdowns that have been earned in big games in four or five years.

THE TWO DEFENSES

WE'LL now take up another matter under much discussion, that of the two defenses, East and West. I was told on all sides that the Eastern system of defense was far better than that of the West. Suppose we take up the case of Michigan alone.

Michigan this last season played Cornell. Cornell scored on Harvard and scored 21 points on Pennsylvania. Michigan beat her 17 to 0, and Cornell only made about four first downs.

Michigan played Pennsylvania, a team that tied the Indians and scored heavily on Dartmouth. Pennsylvania not only didn't score on Michigan but only made two first downs in the entire game.

Where is the Western defense weaker?

There is one factor in which the East has a big advantage over the West—and that is in early training and experience. The big preparatory schools of the East, coached and trained by experts, turn out finished football players. When Brickley, Mahan, and others walked upon the Harvard field as freshmen they already knew more football and had more football experience than many sophomore or junior members of Western elevens. But I am not now talking about men or comparing the power of Eastern and Western teams. I am discussing systems only and advancing the opinion and belief that the time is coming when the East

will adopt the more open Western system of attack.

CAMP'S OPINIONS

AND to show that my belief is not that of a prejudiced Westerner, I submit in addition the opinion of Walter Camp, one of the keenest and closest students of football the game has ever known or ever will know.

In his All-America round-up for COLLIER'S, Mr. Camp, who has followed Eastern systems closely, had this to say in regard to the forward pass: "The forward pass was used rather more freely, but, with the exception of a few weak teams, the weakness of the play lay in its execution, for there are almost infinite possibilities for it."

Mr. Camp goes on to say that if some one should bring that New Zealand back field East and link it to an All-America line, they would probably be "able to score so rapidly as to open the eyes of American players to the passing game."

If a New Zealand back field could accomplish this, is it the fault of the pass as a play or is it the fault of the player that an American back field can't?

If one back field could work it often and another can't work it at all, just how is the play itself at fault? One might just

as well say that batting was of no value to baseball just because a certain team or a certain set of teams were weak hitters.

In the way of another argument, I would like to have the public say which is the more interesting—to see two elevens piling up around the center

of the field and kicking on every other play until one finally drops back for its star kicker to shoot a field goal—or to see a brilliant exhibition of passing and running until the ball is finally swept over for a touchdown? Ask those who saw the Yale-Princeton game and the Army-Navy game for an answer.

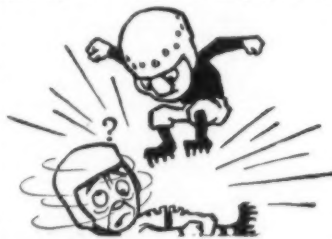
But before it can succeed the pass must first be carried into keen mechanical skill—must take up a lot of hard work and long practice both by the passer and receiver—and must then be employed by a keen strategist who knows how to mix it with the running game—to have one or two men so distributed that it will take two or three of the defensive men out of the play so that the run can be easily made, and if the defense doesn't distribute properly, then the pass can be made.

HERE TO STAY

NO, the open running game mixed up with the forward pass has come to stay and to cover the country, and it is only a question of time before the East will find out that the West has not been running wild but has simply started in making the best out of an advanced game that has come to stay—out of a game that has lost much from the old game and has added only the forward pass to make up for all these losses.

Having this new game, we have not perfected it yet, but when we do I believe we will have one of the most interesting games ever known, a game that calls for combined power, speed and skill above any other. And when they go to this game to get the most out of it, which they will, you will again see Yale, Princeton, Harvard, and others in the East scoring touchdowns and in greater numbers than they have ever scored before. Only they must first give it a chance—not a haphazard, half-hearted, badly executed chance, but rather a chance that meets every test of practice and work. For if the so-called open game is useless, of how much use is an attack which in about six years on some elevens hasn't gained enough ground to bury a quarter back? Why not give the other system a tryout at least? It certainly cannot accomplish less.

The Eastern elevens are composed of men who have had much preparatory experience and are well coached in blocking, tackling, charging, and in all that goes to make high-class football men, and if to all this were added a more varied and deceptive attack, a proper proportion of a bucking, running, kicking, and passing game, I believe their game would be more productive of touchdowns.



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The Tempter and Maria

(Continued from page 8)

quietly. Weariness reasserted itself, and Maria fell asleep again.

Next time she awoke she regained her senses with less bewilderment, and began planning her escape. It ought to be easy when the store opened and the earlier customers came upstairs to the home furnishings. Maria would then find a leisurely way to the street, like any other shopper. She could not go back to sleep, so she sought her old friend, the green-plush chair. Through the parlor window she could see a long way down the dimly lighted vistas of the furniture-crowded room.

"Ain't it lonesome!" she said, shivering.

SOMEWHERE off among the somber shadows a sharp, wavering pencil of light flashed briefly and disappeared. Maria's heart thumped wildly, and she prepared to hide. It must be the watchman. The light flashed again, nearer, this time. Maria stooped by the window, and from behind the lace curtains saw a man coming along an aisle, treading noiselessly, alert and peering. He seemed wishful of keeping as much as possible in the shadows, but the ranked arrangement of the furniture finally forced him under the full glare of a lamp. Maria gasped, for the man was not Flaherty, whom she had often seen at closing-up time, but—Billy Keep!

As he left the zone of light he kept stabbing the darkness with a pocket flash, and Maria viewed his advance in frozen fascination. Following the central aisle, he passed the model flat, then turned at right angles and approached a door set in the wall opposite.

JULIUS SNEDDENFELD had a little room next the home furnishings, where he transacted various items of private business which he desired to keep separate from the activities of the store headquarters on the tenth floor. Frequently, when told that Mr. Sneddenfeld was out, those who knew about the little second-floor room guessed, and correctly, that he was in.

Billy Keep, in some mysterious way, persuaded the locked door to betray its trust, and disappeared inside. Maria could see the intermittent flash of his light, then a faint, steady glow took its place, and the door was closed silently.

Two impulses fought for control of Maria Quinn—curiosity and fear. Billy Keep was a bad lot; what was he up to? What would he do if she intruded upon him? What ought she to do? What did she dare do?

Away back in the deep recesses of Maria's ego lay a tough little streak of moral sinew, stubborn and inelastic. Years of unlovely environment had atrophied Maria's sentimental fiber, had made her oddly "wise," cynical beyond the understanding of most girls—sharp and a bit hard. Virtue in a weakling may emanate from emotions highly keyed. With Maria it sprang from a deeper seed; what strength of adversity should serve to uproot it remained as yet unguessed.

TO determine her procedure required several minutes. She tiptoed across the gloom and applied her ear to the door of Sneddenfeld's private "cabinet." Filtered out a faint clicking, as of metal upon metal, muffled and discreet. Maria turned the handle soundlessly, and when the latch cleared she swung the heavy door inward as slowly as the minute hand on a clock moves from numeral to numeral, and as silently.

Billy Keep's ear was glued to the door of a little safe, and his fingers slowly spun the knob of the combination while he hearkened to the click of the tumblers. On the floor by his knees stood a lighted candle. Maria could not see his face. He presently tried the handle, and the door opened easily. Billy Keep thrust his hand into a small drawer and took out something which blazed in the candle rays with the dazzling splendor of a young sun, and which he turned this way and that in gloating admiration. He did not look Maria's way until he had swung the safe door into place, locking it again with a twist of the knob.

Maria cleared her throat softly.

BILLY KEEP pivoted upon his knees, his body stiffened like a cat's, his jaw dropped, and his eyes widened with

a snap. A cry of fear died strangling in his throat, and he threw up a hand as one who would ward off a blow. Then he grinned, a gray and sheepish grin, tremulous around the edges, like that of a small boy caught jam handed in a pantry.

"Good God, M'ria!" he croaked in a choked whisper. "You like to scared the life out of me. What—"

"You're a burglar, ain't you?" remarked Maria simply and with no interrogatory inflection.

"Me? Naw," protested Billy Keep. "I'm a pipe doctor; I come to fix the plumbin'. Shut that door, will you, kiddo? The watchman might see the light."

Maria closed the door softly.

"What's that thing?" she asked, pointing at the famous Sneddenfeld sunburst in Billy Keep's fingers.

"That," said the young man, "is old Sneddenfeld's wife's boozum pin, or bufooch, or whatever you call it. He keeps it in this child's-size safe. Ain't it a peach? It's worth over thirty thousand plunks."

"Let's look at it," requested Maria. She held out her hand quite naturally, as if the jewel had been a trifle of glass, and Billy Keep laid it unhesitatingly on her palm.

"Ain't it a peach?" he repeated in a whisper. Maria turned the bauble around, regarding it thoughtfully; then she thrust it into the front of her waist.

"Here you, what the devil?" protested Billy Keep. "Quit kiddin'." He caught at her arm, but she backed swiftly away. "Gimme that, you—"

"I'll yell," warned Maria. "I'll let a screech out o' me that'll bring Flaherty here on the jump."

Billy Keep began to plead and reason.

"Aw, M'ria, be nice! Gee, the watchman'll be along any minute now. I gotta git out, see? Gimme it back."

Maria only shook her head stubbornly. Billy Keep swung his hand to his hip and drew a blood-chilling automatic.

"All right," he said fiercely, "then I'm goin' to croak you. You don't git out o' here alive unless you give up that pin, see? I'll count 'three,' and when I say three I plug you. Git me?"

MARIA looked straight into Billy Keep's baleful, mean little eyes. She backed a step, against the closed door, swallowed dryly, and bit her lip. Billy Keep began to count.

"One!"

"Oh, Billy, don't," she cried.

"Two!" said Billy Keep, holding the unwavering muzzle of the pistol point-blank at her face. Maria stood as still as one of the wax figures in a Sneddenfeld window trim. She could feel her heart hammering loudly at the base of her tongue. Her brow was dewy with a cold moisture of terror.

"Gimme the pin?" demanded Billy Keep.

Maria moved her head slowly from side to side, her lips set in a hard little thin line, drooping slightly at the corners. Her head tipped forward a trifle, and her big black eyes glowed up into Billy Keep's, steady and unblinking, their whites accentuated in the candle light. And he, cruel, acquisitive, but human, saw there something infinitely sad and accusing, an indomitable and mocking martyrdom, a spirit in fetters of fear but unconquered. Such a look those who dared to face it saw in the eyes of flame-kissed Joan of Orleans.

"My God, M'ria," whimpered Billy Keep, "I ain't got nerve enough. I couldn't lay a finger on you, not to keep out o' State's prison. Gee, you're a wonder!"

THE girl passed a weary hand across her brow. The compliment, if she might take it as such, brought no answering light into her somber eyes.

"What you goin' to do with that thing, anyhow?" asked Billy Keep. "You don't know nothin' about di'monds. What could you do with it? You can't hock it; you'd git pinched sure."

"I'm goin' to give it back to Sneddenfeld," she said.

"No!" cried Billy Keep. "You dassn't. He'll have you run in—locked up; then where'll you be?"

"In jail I s'pose," she answered.

"Aw, M'ria, what's the use? Come on, that's a good kid; gimme it back



Getting Ahead of Competition



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an' I'll whack up with you, split fifty-fifty, an' take all the risk. I don't know how you got in here, but you can beat it out the same way, an' I'll see you later an' divvy, see? You'd git maybe seven or eight thousand cool bones."

"Nothin' doin'," said Maria, drawing a long, unhappy sigh. "You better skip!" "It's yours as much as 'tis Sneddenfeld's," urged Billy Keep in desperation. "Ain't he got rich offen you poor boobies slavin' yourselves to death for 'most nothin'?" Ketch me! Ain't he squeezed the price o' that thing out o' young fellers an' young girls like you? The's hundreds o' girls night owlin' around this burg an' goin' to hell on a toboggan because o' the likes o' Sneddenfeld, the dirty robber! Don't be a damn fool; take what you can get, I say."

"You better skip," repeated Maria. The man turned and picked up his candle. Then he faced her.

"You ain't done me no good to-night," he said. "I had this job planned away back. But I ain't goin' to lay it up against you somehow. I'd ought to ring your damn neck. If you get in trouble, you send word to me, an' I swear to God I'll go over the road to git you out, see? Remember what I said about Joe Prague, down to McNulty's."

Maria Quinn opened the door and stepped into the dimness of the home furnishings.

"Good night," she whispered. Billy Keep blew out his candle and followed quickly, but she was nowhere to be seen.

"Don't that beat hell!" he muttered as he sped away through the shadows.

JULIUS SNEDDENFELD was in his private office on the tenth floor opening letters with a long silver stiletto. A big man, bulking thickly through the chest, with lumpy features and small, keen, brown eyes, he radiated energy and swift, ruthless decision. As he worked he whistled a thin, unmelodious tune.

"Miss Cannon!" he called. Some one came in and stood by his desk. Sneddenfeld, without looking up, said:

"Take a letter to Stern & Stern. Replying to yours of the eighth instant, would say—"

A hesitant, unfamiliar cough checked him, and he looked up.

"How did you get in here?" he demanded.

"Walked in," said Maria. "They was all busy outside; they didn't notice me."

SHE laid something sparkling on Sneddenfeld's slide. He picked it up and eyed it curiously. He called:

"Miss Cannon!"

A stenographer came in.

"Send for Miss Herman right away." Miss Cannon retreated.

"Sit down," Sneddenfeld directed curtly. Maria sat on the edge of a big chair and dully watched the merchant continue the process of opening letters. He carefully sliced off the back of each envelope, laying it on a growing pile. This was a habit long ingrown, reflecting the scratch-paper economies of earlier days. In a few moments a brisk, keen-eyed woman entered.

"You sent for me, Mr. Sneddenfeld?" she asked.

He handed her the sunburst, and she looked at it in bewilderment.

"I put that in my small safe downstairs yesterday," said Sneddenfeld. "This girl just brought it here. I haven't asked her any questions; that's your business."

HE turned to Maria. "This is Miss Herman, our store detective. Now tell her where you got this pin, and tell it straight and quick."

"Well," said Maria, "I got locked into the store last night because I fell asleep in the model flat, down in the home furnishings."

Sneddenfeld grunted.

"Go on," said Miss Herman.

"I waked up in the night an' I was—I was scared. I come out onto the floor an' I seen a man sneak out o' that door, the one jest across from the flat. He heard me an' ran off, dodgin' in an' out among them chairs an' things. I got awful faintlike an' I went back into the flat somehow, an' I staid there 'til this mornin'." When the customers began to come in I put for the elevator; right near the elevator door I picked that pin up off the floor; that's all I know about it."

Followed a brief questioning, whereby

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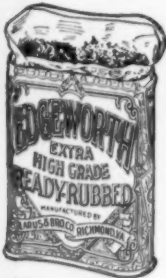
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Maria's history became clear—a commonplace little story of struggle, with no silver-lined clouds to break its monotony of poverty and hopelessness.

"She's lying, ain't she, Miss Herman?" asked Sneddenfeld.

The store detective searched Maria's face, but the girl met her scrutiny level-eyed.

"No," said Miss Herman. "She's telling the truth."

THE telephone at Sneddenfeld's elbow purred, and he answered it. Then he pushed the instrument across toward Miss Herman and handed her the receiver.

"Hello?" she called. "Yes." Then after a period of attention: "Send him up here, please; yes, Mr. Sneddenfeld's private office." She hung up the receiver. "Let's wait a minute. One thing is sure, you'd better discharge Flaherty."

In three minutes a policeman entered with Billy Keep, whom he held warily by the arm.

"I picked this man up in the alley, back o' the store," he said. "He was hangin' round suspiciouslike. Flaherty jst reported he found Mither Sneddenfeld's private room unlocked an' candle grease on the floor be the safe. The safe was locked all right, but Flaherty was upset, d'ye see, an' I thought—well, I didn't quite like the look o' this feller, that's all. He didn't give no rale good expl'nation f'r hangin' about, so I—"

"You thought I'd better have a look at him," said Miss Herman.

"That's what," replied the officer.

Billy Keep glanced shifflly and uneasily at Maria. He tried to appear unconcerned, but repeatedly moistened his lips with his tongue and swallowed quantities of nothing. Said the detective to Maria:

"Miss Quinn, did you have a good look at the burglar?"

Maria nodded.

"Is this the man?"

"Aw, gee, no!" said Maria with a friendly smile. "The burglar was twice as big as him an' dressed different an' darker complected."

In two minutes Maria once more faced Sneddenfeld, alone.

"Well," said he, "I suppose you want a reward."

She shook her head soberly.

"Here," the merchant cried, grinning slyly. He picked up the brooch and tossed it into Maria Quinn's narrow little lap. "I'll give you this. How does that strike you?"

SHE looked down at the shining thing, but let it lie untouched in the folds of her skirt.

"Take it," said Sneddenfeld, "it's made of rhinestones. The real one's in my safety-deposit box. Mrs. Sneddenfeld had this one made up to fool people; understand? The other's too valuable—she doesn't dare wear it, for fear she might be robbed."

Maria laid the pin back on the desk.

"What would I do with it?" she asked blankly. "I ain't no society dame."

Sneddenfeld laughed.

"I guess that's right," he agreed.

"Well, then, you go back to the kitchen-ware and tell Rupert to give you your old job, and tell him I said to raise your pay to seven dollars. He doesn't need any more help, but he can let one of the other girls go. Good morning."

He turned away and began slitting envelopes once more. The brooch lay glimmering in a little streak of morning sunlight. Maria Quinn went out and took the elevator to the basement.

Across the room, above a pile of tin wash boilers, she saw a shiny bald head and a disagreeable face. It was Rupert, the buyer, and he was scolding little Ruby Hymenhal.

The air of the place was heavy and humid and sickening.

"Aw, no," murmured Maria. She ducked up the stairs and elbowed her way through the early shopping crowds to the street.

"Sneddenfeld's ain't the class anyhow," she decided. "I'd rather try one o' them domestic jobs up to the 'Young Women's.' Mygawd, tendin' kids!"

AT the pit of her stomach little demons of hunger played a poignant tattoo. She remembered her eight cents.

"I ain't broke anyhow," she thought. "I can get a cuppa coffee an' have three cents left. Gee! This is a tough o' world."

Secretary Redfield on "Price Maintenance"

SECRETARY of Commerce Redfield makes a most interesting reference to the "one price" principle in his annual report and submits the proposition as one demanding the serious consideration of the general public.

He particularly points out that justice to the consumer even more than to the manufacturer depends upon a knowledge of the truth and a proper solution of the questions involved in the system of "Price Maintenance," should future legislation be required.

Here is the terse, clear way that Secretary Redfield expresses himself on the subject:—

"It is important that we should know the truth about the fixing of retail prices and as to whether giving the privilege of so fixing the prices to a manufacturer tends toward monopoly or does not so tend. Nations abroad are said to favor by law that which we forbid. The law with us is for the time fixed by the decision of the Supreme Court that the fixing of retail prices on the part of manufacturers is unlawful. If, however, new legislation should in the future be required, it is important that the truth be known lest injustice be done, not so much to the manufacturer as to the consumer.

"Some men, well informed, argue that the fixing of retail prices under conditions where competition in manufacture exists tends to promote competition. Others say that the refusal to permit the fixing of retail prices tends to monopoly because, in the cutthroat competition certain to follow, obviously the stronger competitor will survive and may eventually have the business in his own hands, for the law forbids the making of agreements to maintain prices, and under these circumstances the weakest must go to the wall."

A. B. J. Hammel
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No. 152



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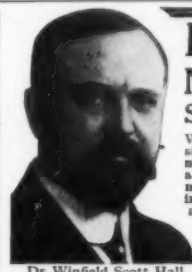
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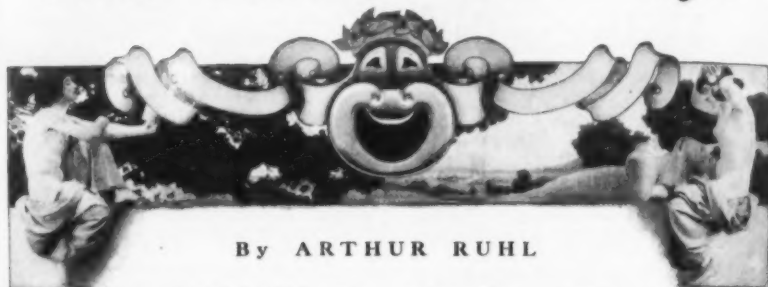
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Mail me, without obligation on my part, your free "Guide Book to Books," containing Dr. Eliot's story of his Five-Foot Shelf.



New York's New Plays



By ARTHUR RUHL

"Rachel" A ROMANTIC comedy founded on the life of the great French actress, with the usual faults of the biographical "costume" play, but interesting as the means of introducing Mme. Bertha Kalich—hitherto known to her English-speaking audiences as an actress of somber, emotional rôles—into light comedy. The scenes, set in the France of '48, are full of color, and Mme. Kalich's performance, although marred by occasional jarring lapses into her heavier tragic manner, is on the whole distinguished and charming.

"The Strange Woman" A SORT of re-tort to Mr. Tarkington's "The Man from Home." The author, instead of taking Middle-Western ideals to Europe to confound a caricatured aristocracy, brings a

charming, sophisticated European to Delphi, Iowa, to show the weaknesses of the caricatured Middle Westerners. The young woman is a determined individualist, with special convictions against the conventional marriage ceremony. Her endeavors, and those of her young man—a Delphian she had met in Paris—to enforce their ideas, supplies the action, and, having contrasted the pettiness of the provincials with his enchanting heroine, the author apparently feels that he has done enough, and permits her to be touched and vanquished by the self-sacrificing example of the young man's mother. Miss Elsie Ferguson plays with a great deal of skill and attractiveness the part of this orchid in an Iowa cornfield.

"Hop o' My Thumb" AN elaborate Drury Lane extravaganza founded on the familiar fairy story and "adapted" to the American audience. Wholly commonplace and occasionally inexcusably vulgar attempts to be funny in the regulation Broadway style, varied by occasional glimpses of the fairy tale, crowds of stage people, a great deal of canvas, and one really interesting and intelligently elaborate scene—a garden of Watteau statues which turn to life on being sprinkled from a magic fountain, and flow into a formal dance. A performance for the very simple-minded, or for children old enough to enjoy the scenery and not old enough to notice the lines.

"Grumpy" A WELL-MADE, thoroughly entertaining little domestic-detective comedy, of mid-Victorian flavor, in which Mr. Cyril Maude, the English light comedian, has an excellent chance to show his versatility in the part of a crotchety old lawyer (the crotchetyness is of the regulation stogy-old-gentleman kind, adored by generations of theatregoers), who varies his complaints about cold coffee, smoking chimneys, and so on, by dazzling bits of octogenarian detective work.

"The Misleading Lady" A LIVE and ingenious melodramatic farce about a flirtatious young woman who dared one of her victims to be a cave man, and was promptly taken up and whisked off in an automobile to a remote lodge in the Adirondacks. Here the careless siren, who had put her honest young man to acute humiliation, is tamed in thoroughgoing fashion and taught that a live man just back from years at roughing it in Patagonia may not ruthlessly be bombarded with all the primitive, if decorously masked, batteries of sex. Mr. Lewis S. Stone gives to the rebellious cave man just the right air of strength and patronizing humor, through which his natural gentlemanliness and genuine regard for the girl always are revealed—a finished performance, with the pleasant suggestion of a civilized personality behind it. A piece of uneven workmanship, but full of surprise and freshness, of its unassuming kind, thoroughly worth seeing.

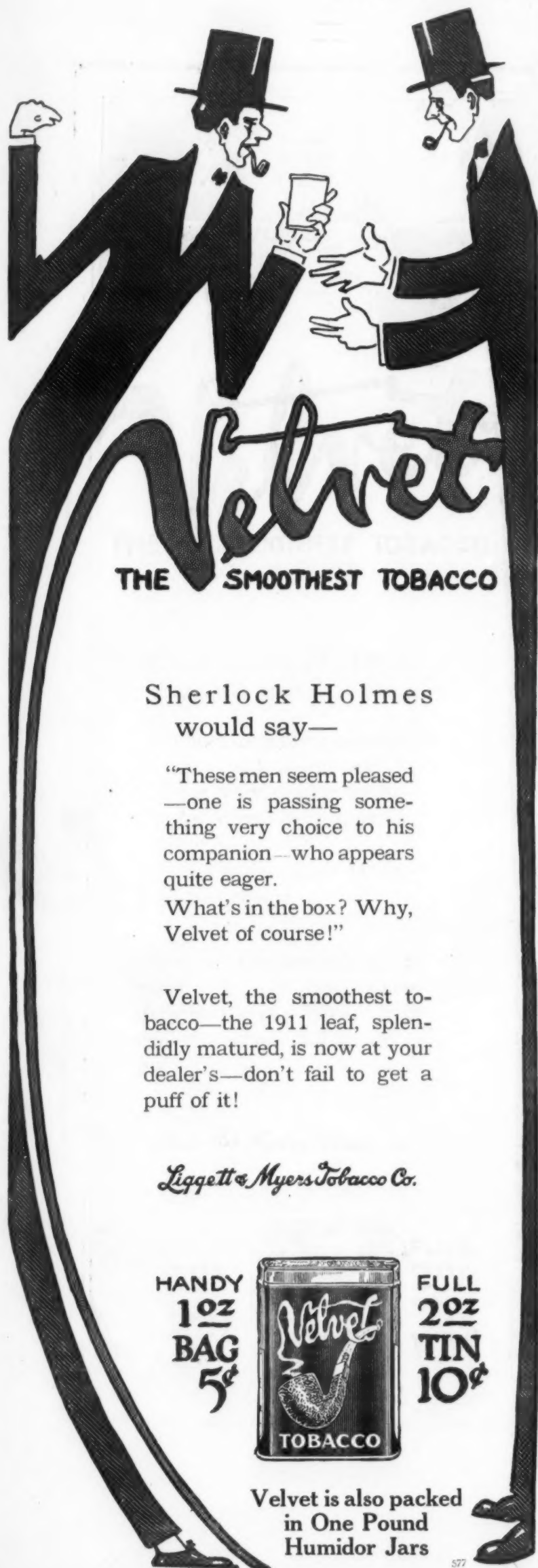
"The Man Inside" A MELODRAMATIC "crook" play in which the sympathy is all with the criminals and against the powers that be. As a play rickety enough, but its structural weakness is mitigated by two atmospheric scenes in Mr. Belasco's best manner—one in an opium den in New York's Chinatown, just as night is fading and the habitués of the place beginning to awake from their stupors, the other in an East Side tenement used by thieves—and by the fact that the arguments of the author, Mr. Roland Molineux, that present methods of punishing criminals are all wrong, are supposed to have been beaten out of the bitterness of his own experience.

Volume 52 COLLIER'S, THE NATIONAL WEEKLY January 10, 1914

Number 17 P. F. COLLIER & SON, Incorporated, Publishers. Robert J. Collier, President; E. C. Patterson, Vice President and General Manager; J. G. Jarrett, Treasurer; Charles E. Miner, Secretary; A. C. G. Hammesfahr, Manager Advertising Department, 116 West Thirtieth Street, New York City

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companion—who appears
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The new Packard "38" Limousine in London

From the etching by E. Horter

Collier's for January 10, in Two Sections. Section TWO

Collier's

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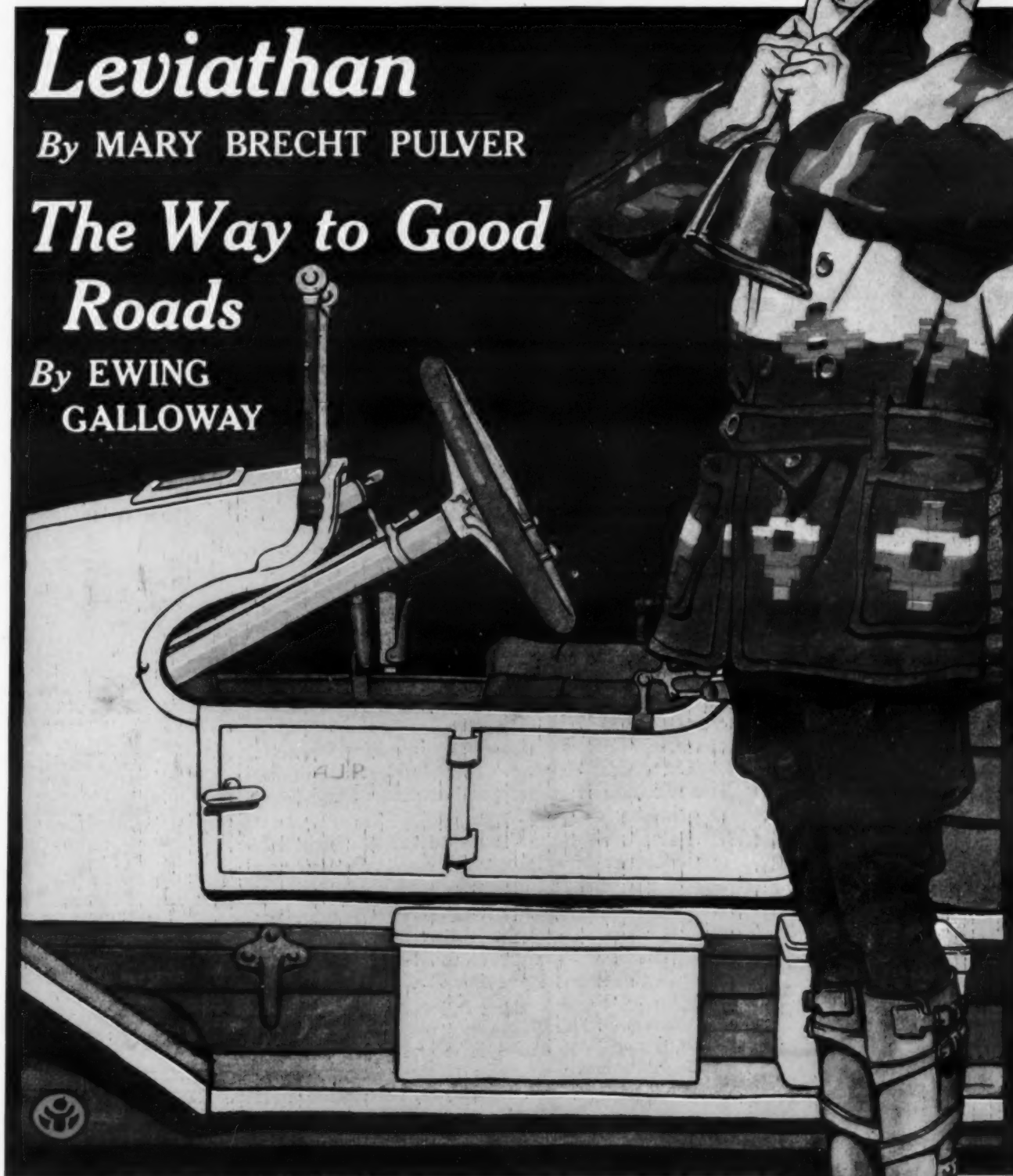
THE NATIONAL WEEK

Leviathan

By MARY BRECHT PULVER

The Way to Good Roads

By EWING GALLOWAY



Automobile Section



This big Model 5 A Touring Car is an ideal all around hard worker—has style too \$1700

WHEN you, as an inexperienced driver, receive your first ride in a Cartercar and the demonstrator invites you to get in behind the wheel and drive the machine yourself—then, and not until then, will you fully realize the wonderful simplicity of the Cartercar gearless transmission. There are no gears to clash or strip in going from one speed to another. Ten minutes instruction is all you will need to be able to drive it like an expert.

So simple is the Cartercar gearless transmission that thousands of owners would have nothing else. The farther you push the lever forward, the greater the speed. Pull it backward and the car runs backward. What could be more simple?

There are but two unit parts of the Cartercar gearless transmission. A disc—and a friction wheel. The two roll together. They do not jerk and do not jar in starting.

Tire mileage on all Cartercars is wonderfully increased because

of this absence of jerking. An unlimited number of speeds is always at your command. In a crowded section, on a very steep hill, or over sandy roads, the car rolls along on any of the low speeds without racing the motor.

Cartercar drivers never dread crowded streets. The machine is under perfect control and there is no grinding of gears.

For eleven years the Cartercar has been a Success. Scores of enthusiastic owners in every community will tell you about it.

Experienced drivers, men who have owned many other makes, are enthusiastic about the gearless transmission, they appreciate the great saving of effort in the handling of this car.

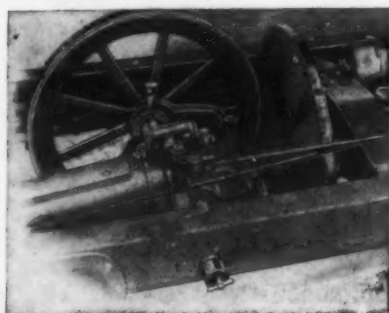
In selecting your car this year, investigate for yourself with an unbiased mind. It will save many dollars for you later on.

Write and we shall be glad to give you full information regarding these cars.

We also have a smaller touring car and roadster at \$1250.



Cartercar climbing the steps of the State Capitol at St. Paul, Minn. One of the longest flights of steps in the country. This demonstrates the wonderful pulling power of the Cartercar gearless transmission and its perfect control. No other Automobile has ever been able to climb these steps.



Cartercar Gearless Transmission showing the two unit parts. Note the simplicity of construction—unlimited number of speeds.

All Cartercars electrically started and lighted, of course.



Model 5C Coupe three passengers—luxuriously finished—electric starting and lighting—ideal for women. Price f.o.b. Pontiac \$1900



Model 5D Sedan—5 passengers—appeals to the man who drives his own car—Price f.o.b. Pontiac \$2000

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Gentlemen:—I am sending this coupon from Collier's and would like complete information about the Cartercar and its gearless transmission.

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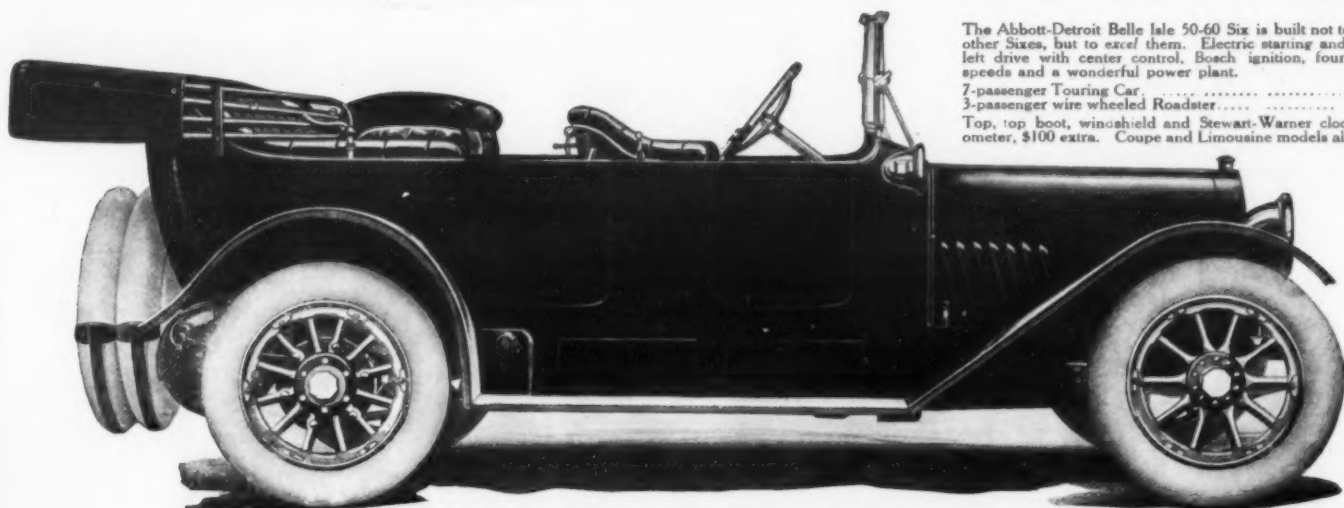
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25 NEW DEALERS WILL BE ADDED NOW

We have increased our production to take care of 25 aggressive new dealers, and the best 25 writing us from unallotted territory will be given contracts for this splendid line.

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*Belle Isle Model 50-60 Six Cylinder 7-passenger Touring Car
Weights only 3680 pounds fully equipped*

The Abbott-Detroit Belle Isle 50-60 Six is built not to undersell other Sixes, but to excel them. Electric starting and lighting, left drive with center control, Bosch ignition, four forward speeds and a wonderful power plant.
7-passenger Touring Car.....\$2190
3-passenger wire wheeled Roadster.....2290
Top, top boot, windshield and Stewart-Warner clock Speedometer, \$100 extra. Coupe and Limousine models also.

Abbott-Detroit

A Peculiar Advertisement—With a Peculiar Reason Back of it

In the absence of any basis for fault-finding in the car itself, the Abbott Motor Company has had to face, for the past year or more, a keen competitive rivalry which did not stop at violations of good business ethics. Intending buyers of Abbott-Detroit cars have been greeted—by other manufacturers and dealers—with such remarks as: "Well, of course if you want to buy an Abbott-Detroit all right. But the company is very shaky financially, and you know what will happen to the value of your purchase if the company goes under." "Do you think you can get repairs for it next year?"

That the car has sold as well as it has, under these conditions, is itself the best evidence of its superior quality. (The Abbott

Motor Company stood fifteenth in value of car product among the leading ninety-two manufacturers in the United States for the year 1912-1913.)

It is true that the Abbott Motor Company has, in the past, had financial trouble—due perhaps to the fact that it has had a smaller working capital than its increasing business required. And it has given more value than any other car at the price.

Hereafter, however, competition will have to be strictly on car-values—not on insinuations regarding the financial condition of the company. For we ask that all manufacturers, dealers, and the general public

Note Carefully the Following Facts:

The Abbott Motor Company has just been purchased by a body of capitalists as sound financially as any in the automobile business—bar none.

The operating personnel at the factory, who have made possible Abbott-Detroit reputation and quality, are retained.

What the new men bring into

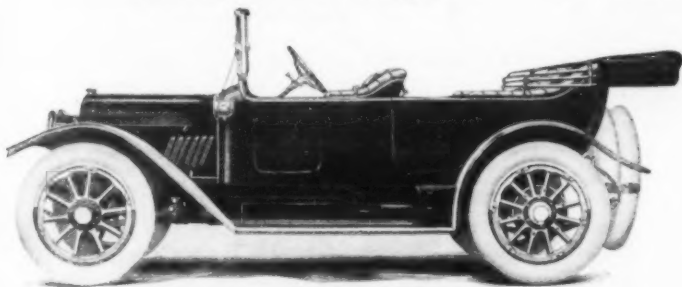
the business is a volume of working capital as great as the proper conduct of the business needs—with as much more back of it as may be legitimately required.

The reorganized company starts out with not a dollar of debt, discounting all its bills. Get your own bank to verify this.

We welcome a straight-out

demonstration and comparison of the Abbott-Detroit, on the fair and square basis of car value, with any other car ostensibly in its class. See the Abbott-Detroit dealer in your locality—he sells cars, not rumors about other cars.

A demonstration and examination of the Abbott-Detroit is his best sales argument.



34-40 4-cylinder touring car

Electric lights; electric starter; electric horn; independent dual magneto ignition.
5-passenger touring car.....\$1685
3-passenger roadster.....\$1685
Top, top boot, windshield and Stewart-Warner clock speedometer, \$100 extra.



44-50 4-cylinder touring car

In all essentials the best 4 cylinder car on the market today. No other stock car has ever equalled the record of the famous Abbott-Detroit "Bulldog"—46,000 miles over icy trails and desert sands—157,436 miles to date.
5-passenger demi-tonneau.....\$1985 7-passenger touring car.....\$1985
3-passenger roadster.....\$1985
Top, top boot, windshield and Stewart-Warner clock speedometer, \$100 extra.
Coupe and limousine models also.

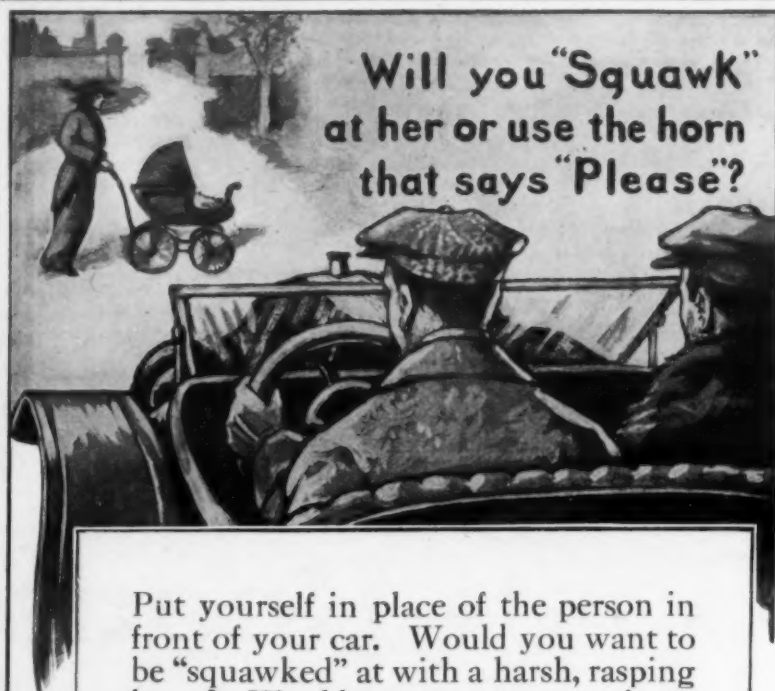
Write for descriptive literature of the 1914 Abbott-Detroit line

Abbott Motor Car Company

558 Beaufait Street



Detroit, Michigan, U. S. A.



Put yourself in place of the person in front of your car. Would you want to be "squawked" at with a harsh, rasping horn? Would you want a motorist to sound a horn that seems to say "get out of the way, you Loafer"? Wouldn't you like it better and move quicker if the signal were pleasant and melodious, seeming to say "Please".

For common courtesy's sake, if for no other reason, equip your car with

Jericho

"The Horn that Says 'Please'"

The Jericho Horn is a gentleman's signal. It warns instantly without offence. In crowded traffic, it is coaxing, genial, effective. It is easily distinguished above the roar and rattle of the streets and gets instant attention.

On country roads the Jericho is powerful and sonorous. Far ahead goes its resonant, attractive note, asking for right

of way, asking with a "please".

Jericho is the perfected exhaust horn. Once attached it costs nothing to operate. It does not drain your power or your pocketbook. It is always ready, responds instantaneously, does not get out of order. It is self-cleaning—guaranteed not to clog or carbonize and to last as long as the car.



The Jericho can be attached to

any car in size to fit—there is a

Special Model for Fords

If you run a Ford car, you'll find the Jericho the most economical and effective horn you can use. Ask for No. 00, made especially to fit all Fords.

Ask your dealer pleasantly but firmly for the Jericho—it is sold by hardware and accessory dealers everywhere.

Jericho Booklet on Request.

Can any Spark Plug stand this test? Yes, the Blitz.



Could you believe that a four cylinder engine would run and run well, up hill and down, with the porcelain of all four spark plugs broken?

That is the test to which a big motor car manufacturer put the Blitz Plug. He deliberately broke the porcelain of all four plugs before starting. It didn't affect in the slightest degree, the working qualities of the

Blitz

"The Spark that Never Fails"

The Blitz Plug stood this extraordinary test because it is doubly insulated. It is the one spark plug with a mica wound sleeve, completely encased in porcelain. If the porcelain should be broken, the mica gives all the protection necessary to keep the spark plug working continuously.

An official of the A. L. A. has a Blitz Spark Plug which ran over 7200 miles with a broken porcelain. The Plug is still in good working order.

You Can Break The Porcelain But You Cannot Break The Blitz Spark

But the Blitz Porcelain is not easily broken. It is specially annealed and will withstand extraordinary mechanical and electrical strains.

The electrodes, or firing points, are made of a special alloy containing platinum iridium, giving resistance to the severe work imposed by high tension magnetos, and at the same time keeping the firing points in perfect adjustment and free from corrosion.

Note the extra large size of these electrodes, insuring long life and perfect adjustment, combined with the hottest spark.

The Blitz Spark Plug is Guaranteed

It is guaranteed against deterioration, against failure from defective material or workmanship; against failure to spark unless mishandled. Every plug bears our guarantee tag. Look for it.

The Blitz Plug costs \$1.00 everywhere and is worth more to you. It is sold by hardware and accessory dealers and garages. Insist on having the Blitz. Write to us if you don't find it.

'B-Line' Oil and Grease Guns



A full assortment of guns suited to every car. For grease, light and heavy oils and gasoline priming, with assorted tips. Solid metal, guaranteed non-leakable.

The Gun illustrated is the Boston Combination which handles everything from Grease to Gasoline.

Ask your dealer for B-Line Guns.

The Randall-Faichney Company, Jamaica Plain Sta. Boston, Mass.

To Dealers—To Live Hardware and Accessory Dealers: Write for our Special Propositions on Jericho Horns and Blitz Spark Plugs and information regarding trade helps.

Collier's

AUTOMOBILE SECTION

Volume 52, Number 17 : : January 10, 1914

The Way to Good Roads

By Ewing Galloway

THE facts in this story are restricted to a single State of less than average area, but their importance is national. They mean much to every American citizen, because they form a big chapter in the current history of the country's vital progress.

The people of Massachusetts are proud of their highways. They have a right to be, because their system of roads is generally considered the best on the continent. They also have reason for some self-congratulation, since they were the pioneers of the good-roads movement. In the Bay State first-class thoroughfares were regarded as a necessity long before it occurred to the common run of people in a majority of the States that good roads were essential to general progress.

The heart of the story was given me by Colonel William D. Sohler, chairman of the Massachusetts Highway Commission.

"The explanation is easy," he said. "In the first place, we have had a pretty thoroughly awakened public opinion—the people want good roads and are willing to pay a reasonable price for them. Also we have good highway laws for local communities and for the State. Our laws are not perfect, of course, but they are generally satisfactory. And then our succeeding Legislatures and Governors have been responsive to the desires and the needs of the people; they have as a rule done everything to encourage the commission. Speaking for the commission itself, I would say that its success has been due to the early adoption of a sound general policy, and to strict adherence to it." Colonel Sohler's explanation, however, is not quite complete. Naturally, he was too modest to say that the good work accomplished has been due largely to the fact that the personnel of the department, from the three commissioners down to the staff engineers, is made up of unusually able, honest, and enthusiastic men. Let us start at the beginning. Twenty years ago the Legislature enacted a law establishing a State Highway Commission of three members whose terms should be three years, one term expiring each year. The purpose of the Legislature at that time was to do what some of the backward States have not yet done—to provide some central authority to collect statistics and other information about roads, and to furnish general engineering advice to the various local authorities in charge of highway work.

A year later it was deemed advisable to provide a reasonable amount of money so that the commission could build small pieces of model road at points throughout the State where they might serve as practical object lessons to small communities.

Then the Legislature decided to have the length of the model roads increased, and to have the State build thoroughfares from the farming districts to the towns and cities. In a short time the market roads became very popular throughout the State, and naturally the demand for them rapidly increased. In the beginning a considerable number of taxpayers were skeptical, but as the mileage of the State roads increased their doubts about the value of first-class highways vanished.

Until the automobile came into general use, there was no necessity or demand for main trunk highways—the one demand being for roads leading from agricultural communities to the markets and rail-

road stations near enough to be reached by horse-driven vehicles.

With the advent of the automobile came the universal demand for trunk-line roads leading through the State and connecting cities and towns as well as reaching to main lines of travel in adjoining States. For the last six years the principal work of the commission has been the completion of such lines.

The automobile not only made the completion of the main lines necessary, but it was very soon found that rapidly moving motor vehicles caused the disintegration of and destroyed water-bound macadam roads which had been and were being built.

Some method had to be devised to prevent the total

of through road leading into Boston, connecting at the city with the various large places south and west, north and east, and with such cities as Lowell, Lawrence, Haverhill, and Newburyport, and also connecting the State highways which are now being built in the neighboring States."

Never a Lack of Money

IN 1894 the commission was given its appropriation, amounting to \$300,000. The appropriations were increased from time to time, and in 1912 the Legislature set aside a construction fund of \$5,000,000 for the ensuing five years.

"When some of the roads had been built about ten years," explained Colonel Sohler, "the problem of maintenance became important, and the Legislature has made appropriations from time to time to cover this expense. When the automobile travel commenced there were some 600 miles of State highways in Massachusetts and the Legislature was appropriating about \$100,000 a year for maintenance. This amount was only sufficient to do ordinary patching, and very little money was available for the resurfacing of worn-out roads. The Legislature then doubled its appropriation, making \$200,000 available for maintenance;

and it also increased the motor-vehicle fees and authorized their use for this purpose, after reserving 20 per cent to be used on roads in small towns, where the expense was borne jointly by the municipalities and the State. The Legislature has also made special appropriations for particular roads. In 1913 the commission had something over \$2,000,000 to spend for the construction and maintenance of State and local thoroughfares." Some time ago the commission's engineers surveyed a line over Hoosac Mountain in the western part of the State. The plans and estimates were referred to the Legislature, which promptly appropriated \$150,000 for the work, the sum asked for by the commission. That is only one of many instances. "In the meantime," continued Colonel Sohler, "the towns had become alive to the value of good roads, and the commission has furnished advice as well as other assistance in constructing highways in practically every town in the State. The cities, however, usually have their own engineering forces. The commission has not only been furnishing advice to municipal authorities, but in many cases it has furnished plans and specifications for both road and bridge work.

"It has constructed about 950 miles of State highways up to the present time at an expenditure of over \$8,000,000, of which the counties repay 25 per cent."

Thousands for Roadside Trees

THE policy of the Massachusetts Commission is not only practical but esthetic. The commissioners believe in beautifying the highways, especially in the vicinity of the towns and cities. They have employed a forester since 1903. At first the forester was supposed to give most of his attention to the protection of trees along the rights of way. Insect pests injure many fine trees if allowed to go unmolested. Later the commission decided to plant new trees along some of the main-traveled roads, and a nursery was established. But recently the nursery was disposed of and the department is now buying its trees. At the present time



The Massachusetts commissioners believe in beautifying the highways, and fine shade trees as well as fine roadbeds increase the delight of travel

destruction of the road surfaces, and consequently the commission had to turn a good deal of its attention to surface treatment. In this work it has been eminently successful.

A good comprehensive idea of what has been done in the construction of State roads is conveyed by what Colonel Sohler recently told me:

"The department," he said, "has continued this policy of building main lines until quite a number of them have been completed; and soon there will be a continuous good road from the New York line on the west to the end of Cape Cod, and to the Vermont and New Hampshire boundaries on the north and east. There will be a trunk line leading north and south in the Berkshire Valley, another in the Connecticut Valley, and still another traversing the State from Rhode Island to New Hampshire, connecting Providence through Worcester and Fitchburg, Mass., with Keene, N. H. There will also be some sixteen lines

about \$5,000 is being spent annually for young trees. Very few States have even taken steps toward preserving old trees, much less planting new ones.

Where Personal Enthusiasm Counts

AT THIS writing Chairman Sohler's fellow commissioners are Frank D. Kemp and James W. Synan. All three are enthusiastic good-roads men. Colonel Sohler, before his appointment five years ago to fill out part of an unexpired term, was continually urging bigger problems on the commission. He talked good roads everywhere and on nearly all occasions. Being a man of much wealth and having considerable time to spare, he thought good-roads boosting was about the best hobby that he could adopt, so he went to work with might and main.

He soon became the most conspicuous figure in the movement, so when a vacancy occurred the Governor decided to give him some hard work to do. Colonel Sohler promptly accepted the position, and did so well that he was reappointed two years ago. His private income is estimated at about \$40,000 a year, and his salary is \$5,000. Though belonging to the Back Bay blue-stocking set of Boston, with many social demands upon his time, he has been at his desk regularly ever since his appointment. Massachusetts officials are allowed annual vacations of thirty days, but all the time Colonel Sohler loses from his office does not amount to a month. Sohler the worker is just as enthusiastic as Sohler the talker. Arthur W. Dean, the chief engineer, is known as one of the most efficient highway engineers in the country, and his staff of division engineers are all able men.

The Law under Which They Work

THE highways of Massachusetts are divided into three classes: State roads, county roads, and city or town ways. City governments provide money for improvements or repairs in their jurisdictions, and the small places appropriate funds at town meetings. County commissioners not only look after county roads, but also have authority to direct work on highways in cities or towns. The county authorities assess taxes on municipalities, and these taxes, as well as the State tax, are collected by the city or town officials.

The State Highway Commission may lay out as a State road any new or existing way in any city or town upon petition of the local government. When a road is so laid out the commission assumes full jurisdiction over it.

The Small-Town Act

CITIES, towns, and villages are so numerous in Massachusetts that much of the through highway mileage is inside the boundaries of municipalities. In most of the States, highways in cities or towns are streets, and must be cared for by the municipal governments, but in the Bay State there is what is known as the Small-Town Act, which applies to all the smaller municipalities—that is, so far as the through roads are concerned. Under this law the State Commission may spend 15 per cent of the amount appropriated for State highway construction.

Five per cent may be spent in towns of less than \$1,000,000 assessed property valuation, the town making no contribution. Five per cent may be used in towns of less than \$1,000,000 assessed valuation, the local authorities furnishing an equal amount. And 5 per cent may be spent in places of more than \$1,000,000 assessed valuation, the municipality contributing an equal amount. The commission has spent \$700,000 under this section of the present highway law. This sum, however, does not represent all expenditures for through highways in municipalities, because in many instances towns, street railway corporations, and individuals have contributed money for State highways and bridges.

Work under this system is generally satisfactory, but there are some instances where small communities permit the main roads passing through them to become almost impassable. Not long ago a city of more than 100,000 population permitted the through roads inside its boundary to get in very bad condition, and did not repair them until the State department protested.

Neglect of roads by small communities is the

weightiest argument for strong central authority. Recently a prominent Middle Westerner remarked to me that one of the reasons why the rural schools in most of the States are shamefully inefficient is that they are controlled by more or less indifferent, incompetent neighborhood officials, instead of central authorities with extensive powers. The same is largely true in the case of rural highways.

In most of the States local officials have full jurisdiction over local roads, and State highway departments take care of State roads.

Freedom from Political Interference

YOU never hear of any branch of a State government's being free from political influence. That is probably as it should be, because public officials out of the reach of partisan influences might be unre-



An idea of the difference in appearance, comfort of travel, and economic possibilities between a good road and a bad road—in this case the trolley line helps to maintain the good road

sponsive to changing public opinion, which is usually expressed in the choice of elective officials. But the Massachusetts Highway Commission is about as free from interference by politicians as it can be. As a rule men have been appointed to the commission because of their especial fitness for the work. And the Governors appointing them have not asked personal favors of them. Nor has the Legislature tried to dictate their policies. On the contrary, the Legislature usually does whatever the commission asks it to do.

Graft scandals such as New York State had in its highway department during the past year or two are unknown in Massachusetts. The Highway Commission does not profess to be able to head off all graft, but it reduces it to the minimum—at least, that is the case if my information is correct. Chief Engineer Dean recently told me that he was sure there had never been any grafting on a large scale.



The above pictures present a typical instance of before and after the Massachusetts Highway Commission has taken hold and smoothed the rough places in the State

"Once," he said, "a manufacturer shipped a large consignment of crushed stone to one of our division engineers, and one of the engineer's assistants noticed that the carloads looked unusually small. A car or two was weighed by our man and found to be about 35 per cent short. The shipper might have got by with a few small steals, but he was so hoggish that anybody could have caught him."

The commission keeps trained men on every job of work. There are four division engineers under Mr. Dean, each of them having a fixed territory for which he is responsible. There is a large staff of men at the main office in Boston, but most of their work is done indoors.

Under the division engineers there are assistants and resident engineers who are assigned to particular pieces of work.

The commission employs about fifty engineers regularly, and during the busy season it has from seventy-five to a hundred.

"Every piece of work," said Mr. Dean, "is sized up before the contract is awarded. Estimates of large jobs are made at the main office, and we know just

about what a contractor's profits are going to be before we advertise for bids. So, you see, we can prevent extortion.

"The division engineers inspect all work under their jurisdiction or have it done by trustworthy assistants. The people get a fair return for practically every dollar that is spent."

Incidentally it may be noted that the Massachusetts Highway Department has been a splendid training school for road engineers. Logan Waller Page, director of the Office of Public Roads in the Department of Agriculture; Austin B. Fletcher, State Highway Engineer of California; Arthur N. Johnson, State Engineer of Illinois; W. W. Crosby, for a time State Engineer of Maryland; Frank H. Joyner, Highway Engineer for Los Angeles County, California; and Laurence I. Hewes, Chief of the Bureau of Economics and Maintenance in the Federal

office of Public Roads, are among a large number of prominent men who received much of their training in Massachusetts.

In a majority of the States a traffic census is something unheard of except among highway officials, but in the Bay State it is an essential part of the commission's plan. The Massachusetts officials consider that in order to know just what to do to a road they must have an accurate knowledge of the traffic that passes over it.

The first general census was taken in 1909. All vehicles were counted and their approximate weights ascertained for fourteen hours a day for seven consecutive days in August and again in October. Records were taken at 238 stations throughout the State. At a few stations where the traffic was extraordinarily heavy the count was made for the whole twenty-four hours.

By this method the average number of runabouts, touring cars, motor trucks, light horse-drawn carriages, and heavy horse-drawn vehicles was obtained. Then during the corresponding fourteen days in 1912 another complete census was taken at the same stations to ascertain the increase of traffic.

Large Increase in Motor Vehicles

THE commission found that during the three years there was a remarkable increase in motor-driven vehicles. To particularize: The number at the average census station rose from 96 to 222 a day, or 131 per cent. In 1909 there were scarcely any motor trucks. In 1912 there was an average of 11 trucks per station per day, or about 3 per cent of the total traffic in numbers, and a great deal more in weight. The number of motor trucks in the remote rural districts was, of course, very small, but on highways near the cities there were from 50 to 75 a day. On some of the roads the trucks amounted to over 16 per cent of the total number of vehicles, and outnumbered the touring cars.

The coming of the touring car and the motor truck has stimulated public interest in good roads, while on the other hand the construction of first-

class highways has caused thousands of people to buy motor-driven vehicles.

It would be next to impossible to exaggerate the benefits the farmers of the State have derived from improved roads.

In many counties in Massachusetts agriculture has reached a very high state of development, and one of the chief causes is the building of fine thoroughfares.

An Example for Other States

GOOD-ROADS men throughout the country point to Massachusetts as having the most complete highway system. At the present time half a dozen States are spending more money for roads than Massachusetts, because they are larger in area and are trying to accomplish a great deal in a comparatively short time. But, considering her area, Massachusetts has gone farther in highway construction than any other commonwealth, and therefore is regarded as the leader in road building.

The success of the Bay State is given additional verification by the adoption of the commission's original idea by the Federal Government. And the Federal authorities have decided to take practically the same kind of a traffic census as soon as the model roads are completed. Indeed it is no exaggeration to say that Massachusetts leads.

The Race

By Henry Knott



A VAST Amphitheatre!
Circled by the populace—
Rome and Indianapolis—
Twenty centuries
Spanned by a day.
A mighty throng!
Impulsed by one desire—
Watching, thrilling, waiting;
For danger, death—and they
Are keeping holiday.

2
Crowds!
Lured by the unusual,
Primitive in instinct,
Lustful for pleasure:
The daring show of brave men
Boldly flinging
Their heritage of courage,
Even life itself,
Into honor's scales,
Where human worth is
weighed
By common voice—
Scales corroded,
Falsified by gold of commerce.

3
The Charioteers!
Sons of Mercury
Ready for the Race—
A titanic strife
'Gainst Time and Chance:
Their steeds
Empowered to scorn
The far journey to the goal.

4
Ah! . . .
Here they come—
Scattering
The affrighted winds aside,
Phalanxed in twos and threes—
The trailed and the trailer—
Fighting
For brick-ribbed pathway
Whereon to win
Pride of place:
The Pole,
The plaudits
Of one hundred thousand tongues,
And opportunity to outwit
The merciless, onrushing tide
Of men and steel
Behind.

5
Drivers, mechanics,
'Passioned
By lust of flight,
Whirling
Like toys
Spun by some giant hand
In wanton play.
Fleeing
Like leaves
Caught in the maelstrom
Of some elemental storm—
On, on!
The race is to the swift,
To the strong!

6
Bang!
What's that?
Craned necks,
Clenched fists,
Oh! . . .
Staggering

Red-crossed,
Idly flapping
O'er the hospital tent.

8
Oh, look! look! look!
That car at the turn!
See! See! . . .
It skids and twists—
It leaps—
Yes! . . . No! . . . Yes! . . .
Full tilt
At the wall by the track
Like an evil thing,
Diabolical—
Intent to maim,
To wreck, to kill. . . .
"Why doesn't he stop it?"
"The fool" . . .
Oh, God. . . .
It doubles back
Upon the track.
See, there! . . .
'Tis up in the air,
On end, atwist,
Help! . . .
It somersaults twice—
Thud! . . .

And storms the blood
With likes and hates.
For human interest
Concentrates,
Chooses a car
It desires to win,
Not for a reason,
But only a whim.
Then, strange to relate,
That car through the
hours
Carries the issues,
Decrees of fate
That seem to be ours:
We drive it,
we urge it
Around the
track,
With nerves
all taut
And hearts
a-crank:

The lust of the thing:
For the second car
Has a fighting chance;
So has the third:
Then a tire goes "bing."

12
"Will he last,
Do you think?"
Shouts a man to a friend
As a car rushes past
Then is lost at the bend.
"You never can tell,
The first may be last
A minute from now—
It's all in the game."
"Not for mine,
Old chap,
Too crowded the risk
For the money or fame."

13
"Here he comes! Here
he comes!"
"The Frenchman wins!"
Loud shouts from the
throng,
Then the cheering begins:
"You win—you win—
Hooray, hooray,
A race well won;
Bravo, No. 16!"
As over the line
The car comes along.
The checkered flag drops—
Time—
6.31.43.
"Go on—go on . . .
Don't stop—don't stop . . .
Drive one more lap . . .
That the rest . . .
Of the crowd may see. . . ."
Hark! The noisy praise
Breaks over the track
Like the roar
Of the restless sea.

14
Around again
At a dizzying gait,
Then on to the pit
Where comrades wait—
Some laugh, some cry
(All gesticulate).
One capers a dance
As a flag is unfurled,
Tricolored of France.
Then
Happens that gallantry
Which belongs to the world
Wherever brave men
may be:
The victor aloft
Waves the Stars and
Stripes
As symbol of victory!



Like a bird
Wounded in flight.
A car
Hesitates . . .
Perilously swerves . . .
Then, high in air,
Hurtles the rubber frag-
ments,
Just now—a tire.

Crash on its back,
While human nerves
Collapse. . . .

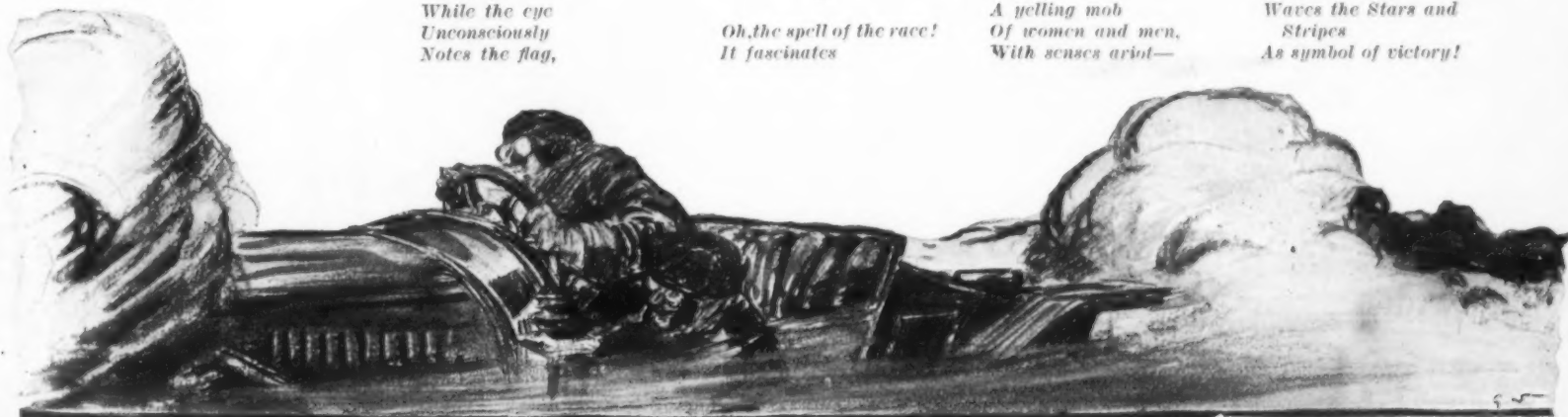
9
A tangled mass
Of iron and steel,
Distorted—
Accurst.
For there by its side,
On the grass,
Lie two brave men,
With broken limbs
And bodies bent—
Silent, grotesque,
Stunned, bleeding, spent—
They knew the risk
Was to flirt with Death;
So did the crowd,
Who half expected
This event.

10
Oh, the spell of the race!
It fascinates

We shout encourage-
ment,
Suffer suspense
As it lags behind
Or forces the pace.
Oh, the spell of the
race
Fascinates!

11
"Here they come"—
Desperate, swift—
First, second, third;
Then the fourth;
Then the fifth!
Excitement stirred
To feverish pitch,
As voices lift
Through the racket
and din,
Cries to the driver
They hope to see
win.
A yelling mob
Of women and men,
With senses a-riot—

7
Look!
From under the hood
As a car thunders by
Leap tongues of fire,
Bringing the crowd
To its feet;
For danger dire,
Explosion, wreck,
Confront the moments
With a white suspense,
Which takes the blood
From the face to the
heart.
While the eye
Unconsciously
Notes the flag,



Section Fisk Straight Side Tire



We Hold Our Trade

ONLY *permanent customers* can make permanent success. Only *satisfaction* can make *permanent customers*. On this belief we base our manufacturing and selling policies.

We do not aim to sell to the million car owners. We do aim to please continuously our part of that million to whom we sell whenever tires are needed. *We hold our trade.*

Year after year, for car after car, we sell to the same customers. Fathers and sons, brothers, business associates and friends recommend us one to another.

We offer tires of demonstrated quality, the courteous and far-reaching service of an unusually efficient organization, a sincere effort on our part to hold our customers by square dealings. This is a policy which insures economy and fair treatment to the tire user.

For Sale by 18,000 Dealers Everywhere and by Fisk Branches in All the Principal Cities. Address Dept. P when writing.

THE FISK RUBBER COMPANY

Factory and Home Office

Chicopee Falls, Mass.



Capturing a World Market

By Reginald McIntosh Cleveland

IF YOU would read succinctly the story of American commercial vigor—that combination of far vision and quick action which

has made Europe gasp with a sort of puzzled alarm—you will find it more clearly written, perhaps, than on any other page of the lexicon of the decade in the record of export trade in automobiles. The building of automobiles is the youngest of our great industries, yet American methods have already given our motor-car manufacturers a commanding position in the markets of the world. From a position of insignificance they have advanced to a position of practical leadership in a time so short as to seem incredible. It is not twenty years since the only motor cars we knew were visitors from foreign shores; to-day there is not a country in the world in which American-made automobiles are not carrying passengers or goods. The change represents a volte-face which is one of the most remarkable in history.

By taking a period of fifteen years, from 1898 to 1913, and dividing it in three, one may see at a glance what has happened. In the first year of this period, while the value of our automobile imports was comparatively trifling, that of our automobile exports was practically nil. At about the halfway mark of the period, in 1906, these items, roughly speaking, balanced on our trade ledger, each being approximately \$4,000,000. But at the end of the decade and a half in question, with the close of the fiscal year 1913, our imports of motor cars were worth less than \$2,000,000, while our exports were worth more than \$26,000,000! This was exclusive of parts and tires. Small wonder that the motoring talk of the principal manufacturing countries of Europe should be concerned chiefly with the "American Invasion." How to stop it? How to meet it? How to rival it?—these are the questions of most vital interest to makers of automobiles across the seas. Meantime it goes steadily on.

When one has realized the significance of the bare figures of our automobile exports, the obvious and interesting thing is to seek the cause. We cannot claim that it is to be found in the superiority of the American machine *per se*, for we are still ready to take a leaf from Europe's book in matters of engineering practice and refinements of design. The secret of our astounding success in the foreign field lies rather in the excellence of our product for the price; in our great superiority in methods of production and marketing. It is to be found in the daring which has led to the manufacture of automobiles on a scale unthought of elsewhere, and in the genius for organization which has made possible the distribution of this great outpouring on an economic basis. The American maker of motor cars, like the American maker of shoes and of rails and of chewing gum, has not been content to supply the demand which he has found, but has thrown his energies into the creation of an ever larger demand. In so doing he has multiplied his output to a point which has enabled him to buy at prices far below the small producer and, consequently, to make use of materials of a far better quality than the small producer could use, sale price being equal. In this way he has achieved what Europe has constantly deemed the impossible, a maintenance of high quality without a concomitant scale of price.

This kind of manufacture is well illustrated by the production schedule for 1914 of one of the leading American makers; probably the second largest in the country in point of number of cars built. This maker will build 50,000 cars during the present year. Into their making will go 20,000 tons of steel and 3,400,000 pounds of aluminum. The minimum number of carloads of outgoing freight will be 33 a day and the

United States very nearly one motor car for every hundred of population. He has advertised, he has demonstrated, he has innovated in a score of ways. One instance of the contrast in the American and European point of view in selling will suffice. We have seen that the foreign editions of the catalogue of one company operating here are to be printed in lots of hundreds of thousands. Naturally they are for free distribution.

The representatives of a group of leading English and Continental makers, on the other hand, have recently published the fact that their descriptive literature could only be had upon the payment of two dollars—which would be returned after the purchase of a car! It is true that the force of the illustration is rather weakened by the fact that the products are of quite different class and price, but it is illuminating none the less.

Novel methods of introducing in various lands cars made in this country are constantly being tried. For instance, a light motor delivery wagon, made in Detroit, is to start in December on a trip round the world as a part of an interesting commercial expedition. Ten men from a Philadelphia exporting company will sail for Sydney, Australia, from San Francisco for a trip the itinerary of which includes every considerable city in the world, save in the United States and Canada. This trip will take about two years to finish and it is estimated that it will cost \$375,000. Each of the ten men will represent a different commercial line, one of these being motor trucks, the one taken on the trip to serve as a sample. A contract has been made to deliver 250 of these trucks at various points on the habitable globe, to be specified as sales are made. The men of the party with their helpers will in many instances travel in a special boat



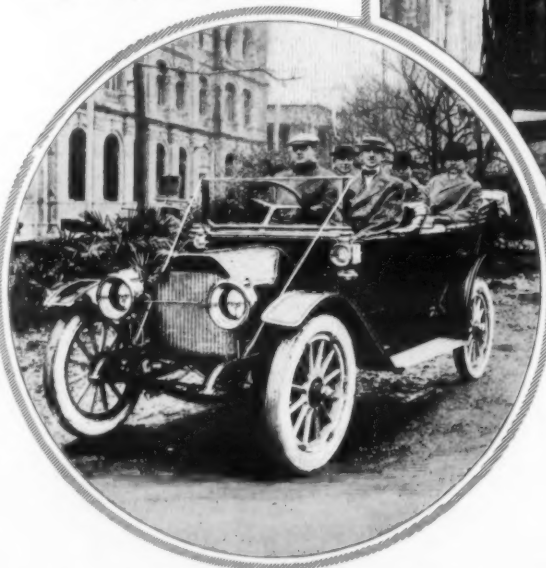
On the water front of Rio de Janeiro you will find the American makes dotting the landscape

A train of American automobiles arriving in Madras, India, to supplant the speedy bullock team



Crossing Jackson's Drift, five miles from Johannesburg, South Africa—United States style and Afrikaner

Dr. Sun Yat Sen in an American car at Nanking, China, where cars are as yet not so numerous



1914 catalogue is printed in 1,000,000 lots, while the German, French, Italian, and Portuguese editions are to be run in lots of from 300,000 to 500,000. Cars of this mark sell all over the world, and they sell for less than \$1,000 apiece.

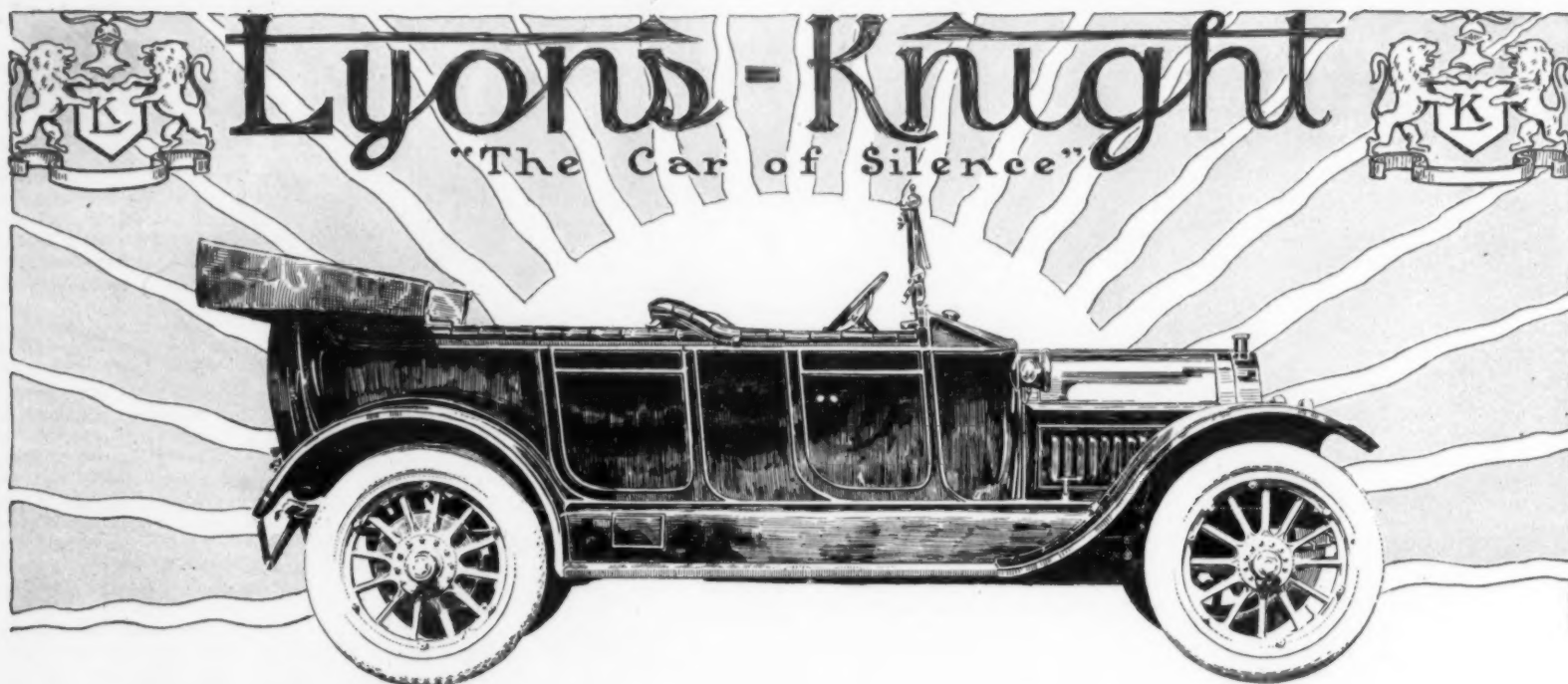
Production on a titanic scale is the explanation of the price.

Even these figures are overshadowed by those of America's largest maker, whose factory employs 16,000 workmen and whose production for this year is expected to be at the rate of considerably more than 1,000 cars every day of the year, counting Sundays and holidays. In a greater or less degree the production statistics quoted are approached by dozens of makers in this country. The output of any of our larger makers for a month is far bigger than that of the largest maker in Europe for a year.

To reap the fruits of his methods of manufacture abroad, the American automobile builder has extended

which will wait for them at various ports on island and mainland while they visit the "trade." At numerous points on the trip the motor truck will be loaded with the merchandise represented by the salesman of the party and this will be carried overland from city to city. One of the runs to be made is from Singapore to Upper Lampur in the Straits Settlements, where it is believed a very large order for commercial motor cars can be booked, since motor trucks are badly needed there for the transportation of rubber. Other long trips will be made in India, China, Japan, and Europe, in which the truck will be used as a carrier of samples of goods in which the members of the party have interest and as a sample in itself. It is merchandising and enterprise of such original stamp as this which has helped to give America her leadership in the automobile world.

Generally speaking, all the prominent makers in this country have foreign connections; some of them have scores of agencies; others have many branch houses scattered from the Antipodes to the land of the Midnight Sun. One maker, who cannot be said to have made a strenuous campaign for the export business, has distributing agencies in twenty-one different countries. Automobile men from South America, England, Scotland, France, Germany, Russia, and China have visited his factory. In a single day not long ago orders were received for ten cars from



The Dawn of a New Era!

WITH the New Year of 1914, comes a new era in motordom. For twenty years the automobile has passed through the experimental stages in design—in materials—in methods of manufacture—in sales and in service. Now comes the Lyons-Knight as the first car of a new era. Because of its many better features it is important that you see and know its value before you buy *any* car. Here are reasons:

A Great Change for the Better

The automobile industry has worked toward this great change for years. The history of other automobile factories proves it. The million motorists of America have learned to know the features that go to make automobile value.

One group of men, backed by ample capital, foresaw this change. They secured one of the greatest manufacturing institutions of America. They brought to their organization the most experienced engineers and production managers. For two years they studied to produce the car to satisfy the experienced motorist. They designed and erected machinery to construct such a car. They anticipated the dawn of the new era.

The result is the Lyons-Knight—a car that is different and better than any other high class car.

This car is backed by a service—by a broad-gauge, business-like sales policy that has secured the finest dealers from the old days of the automobile.

This great, new, live, strong, aggressive organization ushers in the first car of the new era.

What the Lyons-Knight Proves

"The Car of Silence" is proof of this new era in automobile design, manufacture and value. One ride in it will convince you that its makers have produced something different and better.

The Lyons-Knight is no more a 1914 car than it is a 1918 car or a 1924 car. So staunchly and truly is it built that years of use but make its operation smoother and more efficient.

The lines of the bodies are such that this car will be a standard for years to come. Nothing radical this year or next—always pleasing and up-to-date.

The Lyons-Knight engine is the finest power plant ever placed in any American car. Its makers guarantee its performance to surpass that of any four-cylinder poppet-valve engine of equal size—to surpass a six-cylinder poppet-valve engine of larger size even in the

points of smoothness and flexibility as well as power.

Worm drive brings to this big 130 inch wheel base car an added smoothness and balance—freedom from vibration and sounds the death note of the grinding gears which marked the finest cars of the old era.

Point after point adds to the proofs that this car is representative of a new order.

Before You Buy

You will find the great, growing, multiplying Lyons-Knight organization reaching out over the entire country. Its representative in your city is one of the most experienced men you can find. He will put you in touch with the new era in motordom that means greater value out of every dollar you invest.

Lyons-Knight cars will be on display at both the New York and Chicago Automobile Shows. Full information about the great organization and descriptions of the cars themselves will be mailed you on request.

Know about them—before you buy.

**Lyons-Knight K-4
Five Passenger
Touring Car . . \$2900**

Ask for Catalog and Proofs
Lyons Atlas Company
INDIANAPOLIS, INDIANA

**Lyons-Knight K-4
Seven Passenger
Touring Car . . \$2980**

Shanghai, three from Yokohama, four from Moscow, six from Ponce and six from Düsseldorf. No hard and fast rules have been laid down as yet for the handling of business in foreign lands. Some of our dealers profess themselves quite satisfied to make their sales through dealers native to the particular country in question; others use American salesmen, while several have established true branches with service stations and complete equipment of parts. This is generally considered the wisest course to pursue wherever the volume of business warrants it.

American Cars Make Their Way

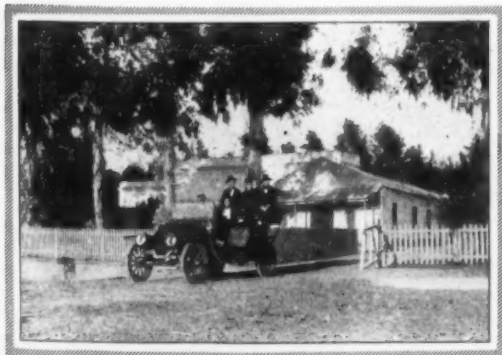
PERHAPS the keynote of American success in this field is temerity of the right sort. Certainly this quality is an outstanding one. One of its latest manifestations is the case of an American motor-car engineer who had been identified with a highly successful low-priced car at its zenith some five years ago. He is known as a man of originality and a designer of ability. About a year ago he sailed for Paris, and since then he has been at work, with the assistance of other American and some French engineers, designing two new models, one a small automobile, the other a cycle car. A factory has been built in France and another secured here, and it is proposed to market both models in each country at a surprisingly low price. As far as the French end of the business is concerned, this will be an American invasion with a vengeance, for our production and manufacturing methods are to be used on their soil to beat the Frenchmen at their own game. So much concern has been caused on the other side of the Atlantic by manifestations of this kind of "hustling" and by the fast-growing popularity of the cars made in the "States" that it is probable serious efforts would have been made to block the further spread of the American motor had the new tariff law not let down the bars a bit to automobiles imported into this country. The representative of the Automobile Importers' Alliance in New York City, during a trip of inspection on the other side before the clauses of the new bill relating to automobiles had been determined, found a degree of hostility which was surprising. He reported on his return that in several countries automobile manufacturers were ready to start a vigorous movement for the enactment of a discriminatory tariff against American cars, and they were with difficulty persuaded to await the passage of the Underwood tariff in view of its probable reduction of the duties on cars destined for this country. Just what the effect of the change in the tariff will be it is difficult to say.

Naturally, its effect will be greatest on imports, and we may reasonably expect to see a considerable increase in the American consumption of foreign-built cars, especially those of two types. One will be the large, powerful, splendidly finished product of one of the leading foreign factories, the chassis of which may now be brought in at a reduction of 15 per cent in duty; the other the small car, valued at less than \$2,000, from the same factories, which can now be brought in complete at a reduction of 30 per cent in duty. On the export side of the fence some effect may be expected also, and this is likely to be a beneficial one for the American maker, for now that the British or the Continental manufacturer feels that he will be able to reap some advantage from his lower wage scale when he sends his machines to this country, we will probably hear less in the next year or two of plans to put a halt to inroads of the Americans.

The Dewar Trophy Twice Won

THE man who builds motor cars in Michigan, or Indiana, or Ohio has been catholic in disbursing his product. He has shown no partiality. Of the motor trucks which are slowly taking the place of the bullock carts in India a goodly proportion were made in the United States, and "U. S. A." will be found on sweetly running motors in the heart of Africa, in the islands south of Asia, in Australia, Tasmania, and many sections of the southern half of the Western Hemisphere.

Our consul at Colon reports that there is at pres-



This American car has its habitat down in Montevideo, Uruguay, a country not commonly associated with automobiles

ent one automobile company there which has four American touring cars for hire, and adds that a company which has the agency for an American automobile for the Republic of Panama is to bring down several machines for taxicab service in the Canal Zone. This will be run in competition with coachmen with consequent low rates, ten cents a person being the contemplated charge for short hauls.

Not less varied than their ultimate destinations are the types of American cars being exported, although, of course, the low- and medium-priced cars dominate the trade in point of numbers.

Little and big touring cars, limousines, runabouts, and trucks of many capacities are finding their way overseas. Not long ago an electric car with a closed body—a type in which the American maker is preeminent—was shipped to a Japanese gentleman for use in the streets of Tokyo. Much interest at present centers round the part which the cycle car manufactured in this country is to play in the export trade. It is prob-



*A party of Japanese spinning along Harbor Road,
Yokohama, in one of our makes*

lematical, for cycle cars are novelties here. At present these little vehicles, neither automobile nor motorcycle, yet partaking of the nature of both, are far more numerous in England and in France than in this country. In the vernacular, Europe "has the jump on us" in their manufacture. But it is freely

Countries	Commercial		Passenger		Countries	Commercial		Passenger	
	Number	Value	Number	Value		Number	Value	Number	Value
Austria-Hungary	2	\$3,959	135	\$91,781	Santo Domingo..	1	\$1,858	7	\$5,382
Azores .....	..	..	16	10,549	Argentina	35	78,000	1,062	1,181,735
Belgium .....	..	..	94	85,679	Bolivia .....	..	..	2	1,493
Bulgaria	2	1,528	17	11,457	Brazil	36	75,073	987	1,035,247
Denmark	3	2,120	81	77,149	Chile .....	..	..	78	109,499
Finland .....	..	..	51	53,568	Colombia	3	6,112	110	113,331
France	6	10,709	818	615,086	Ecuador	1	2,017	74	55,372
Germany	4	4,029	845	764,389	British Guiana..	..	..	18	14,313
Gibraltar .....	..	..	7	6,576	French Guiana..	..	..	1	558
Greece	1	1,176	4	4,080	Peru .....	..	..	70	55,646
Iceland .....	..	..	2	1,016	Uruguay	7	19,280	209	273,253
Italy .....	..	..	331	280,961	Venezuela	23	34,291	104	109,499
Netherlands ..	2	4,489	111	94,163	Aden .....	..	..	15	7,998
Norway	2	2,200	78	66,689	China .....	..	..	89	90,456
Portugal	1	1,400	73	58,931	Chosen (Korea)..	1	3,500	7	6,095
Rumania	12	12,000	38	30,337	British India....	..	..	439	355,573
Russia in Europe	13	34,163	580	484,913	S. Settlements...	2	5,588	387	319,247
Servia .....	..	..	2	1,160	Other British E.	..	..	..	..
Spain	1	1,400	186	127,621	Indies.....	..	..	39	31,245
Sweden .....	..	..	256	235,918	Dutch E. Indies.	2	4,840	278	198,378
Switzerland ..	..	..	22	24,065	Hongkong .....	..	..	7	6,073
Turkey in Europe	..	..	13	9,814	Japan	21	32,770	312	364,507
England	184	119,468	3,783	2,893,785	Russia (Asiatic)	..	..	1	1,160
Scotland .....	..	..	6	8,104	Siam .....	..	..	56	35,934
Ireland .....	..	..	6	5,538	Turkey in Asia..	..	..	1	824
British Honduras	..	..	1	1,800	Australia & Tas-	..	..	..	..
Canada	489	1,104,237	6,723	8,229,324	mania.....	17	23,027	2,083	1,896,990
Costa Rica.....	2	5,643	13	14,955	New Zealand....	1	1,291	958	990,837
Guatemala .....	..	..	10	14,892	Other British	..	..	..	..
Honduras	1	3,000	4	8,100	Oceania.....	..	..	3	2,396
Panama .....	..	..	39	45,432	French Oceania..	2	3,400	11	14,065
Salvador .....	..	..	11	13,212	German Oceania..	..	..	1	350
Mexico	35	83,363	235	423,123	Philippine Isl'ds.	43	91,800	517	577,040
Newfoundland ..	4	8,845	9	10,353	British W. Africa	..	..	4	2,688
Barbados .....	..	..	7	5,973	British S. Africa	11	9,476	1,279	1,157,895
Jamaica	4	9,234	62	59,131	British E. Africa	..	..	14	12,802
Trinidad .....	..	..	43	39,902	Canary Islands..	..	..	10	6,426
Other British W.	..	..	..	..	French Africa....	1	858	10	7,297
Indies.....	..	..	7	6,716	German Africa...	..	..	5	3,175
Cuba	14	23,639	223	242,686	Liberia .....	..	..	1	805
Danish W. Indies	1	4,250	4	2,131	Portuguese Africa	..	..	20	16,102
Dutch W. Indies	..	..	19	14,590	Egypt .....	..	..	16	10,156
French W. Indies	..	..	5	3,877					
Haiti	3	5,553	38	24,499		993	\$1,737,141	24,293	\$24,275,799



These four American cars were photographed at Neubourg, Normandy, a town of only some two thousand population

predicted that once our methods of quantity production have been applied to their building they will follow the lead of their larger motor-car brothers and go forth and inherit the earth. Certainly, from the advance announcements of companies about to make vehicles of this type, they are to be produced in the United States at a price which will make anything on the European market look to its laurels.

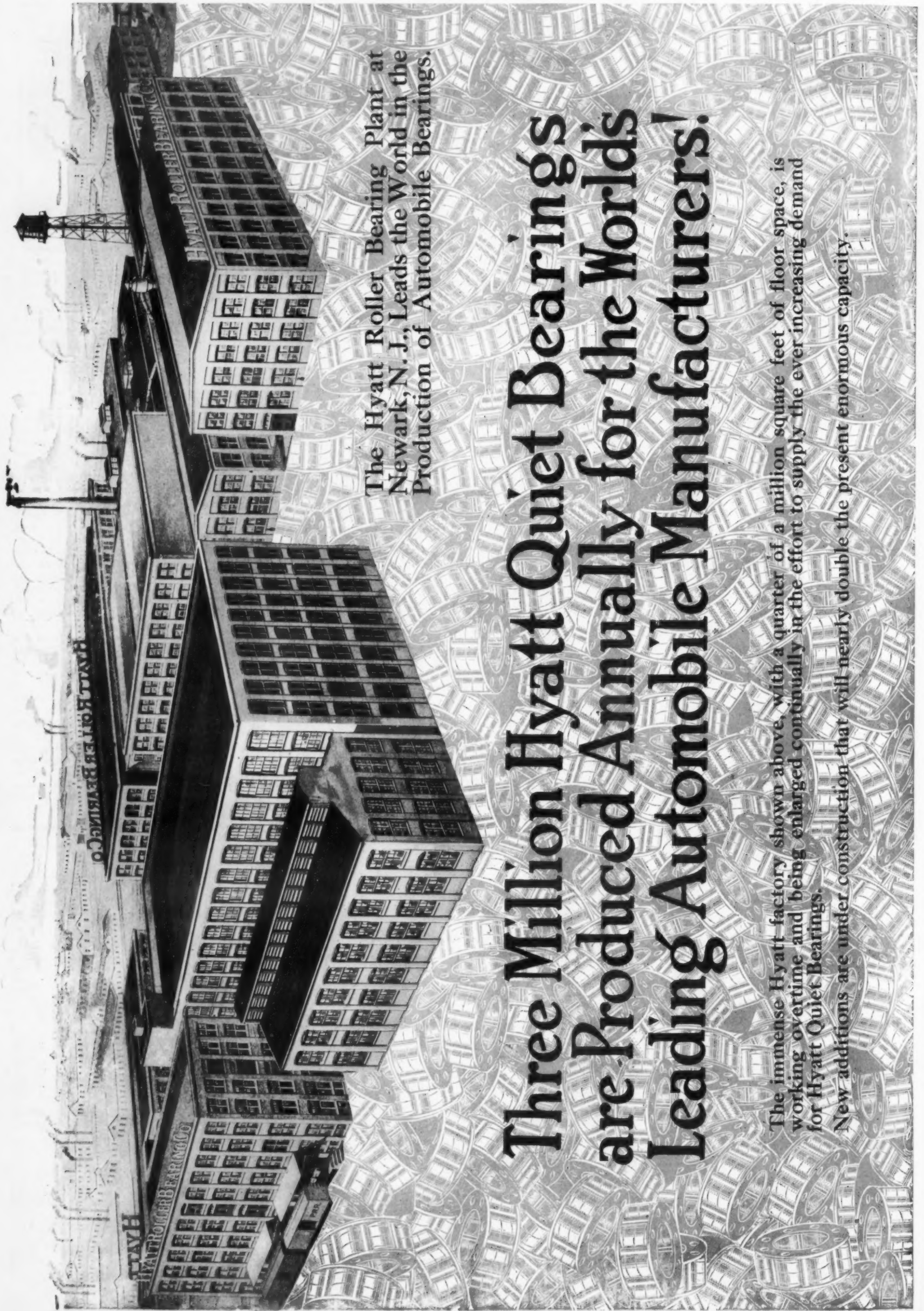
In the last as well as in the first analysis, it is production method that tells the story. Making automobiles may be justly compared to hatching chickens.

Europe, with her larger proportion of handwork, her small annual output, her cautious procedure, is the setting hen with a limited, if select, brood.

America, pushing, impatient of delay, has turned to mammoth incubators and the name of her chicks is legion. Nor do these motor-car chickens come home to roost. They have a remarkably modern and self-sufficient way with them and make themselves thoroughly at home in strange fields. American-built motor cars are quite able to hold their own with those of foreign manufacture in matters of performance. The 1914 model of a car built in Detroit has just won for the second time the Dewar Trophy, awarded by the Royal Automobile Club of Great Britain. This trophy is awarded annually to "the motor car demonstrating the greatest achievement toward the advancement of the industry." A car of the same make took the trophy five years ago, and its recent win gives it the unique position of gaining the prize twice. The test in this competition was a run of 1,000 miles over all sorts of roads and at a compulsory average speed of 19.5 miles an hour.

The electric starting and lighting systems and the novel two-speed rear axle with which the car is fitted were subjected to constant test. The result was a triumph for American workmanship.

How rapidly American automobiles are being scattered to the far corners of the earth is manifest from the Government's report on exports at the close of the last fiscal year. This shows the number, destination, and value of domestic automobiles exported and may be tabulated as follows:

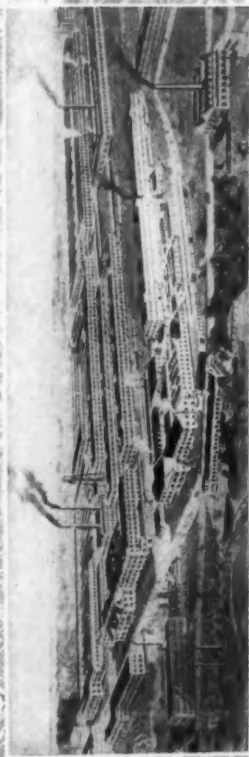


The Hyatt Roller Bearing Plant at Newark, N.J., Leads the World in the Production of Automobile Bearings.

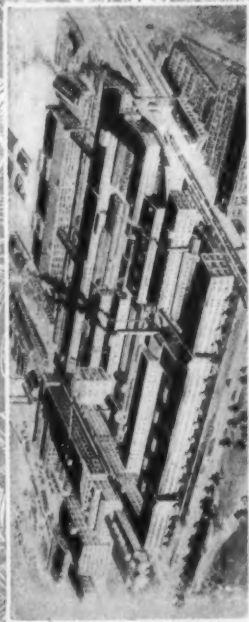
Three Million Hyatt Quiet Bearings are Produced Annually for the World's Leading Automobile Manufacturers!

The immense Hyatt factory shown above, with a quarter of a million square feet of floor space, is working overtime and being enlarged continually in the effort to supply the ever increasing demand for Hyatt Quiet Bearings.

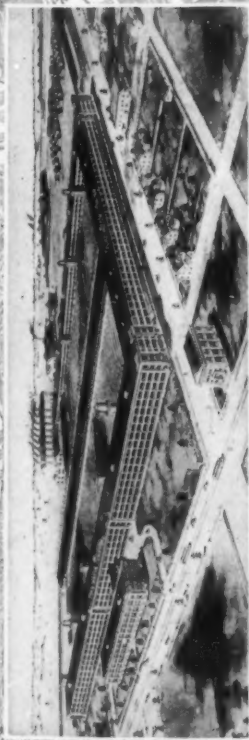
New additions are under construction that will nearly double the present enormous capacity.



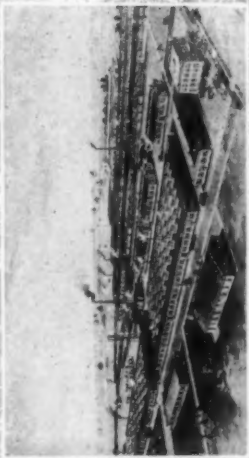
Ford Motor Co.



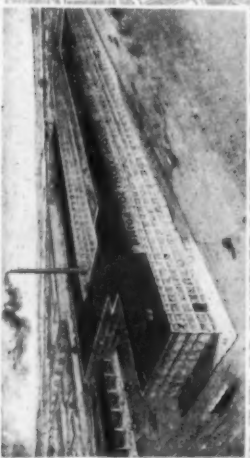
Willlys-Overland Co.



Maxwell Motor Co.



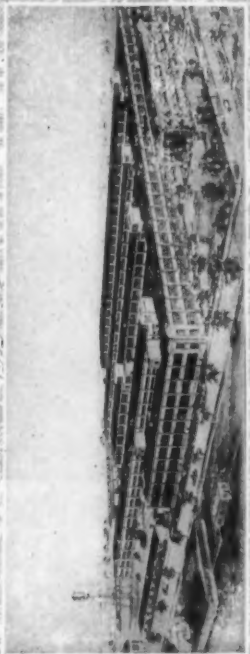
Philco-Detroit Motor Car Co.



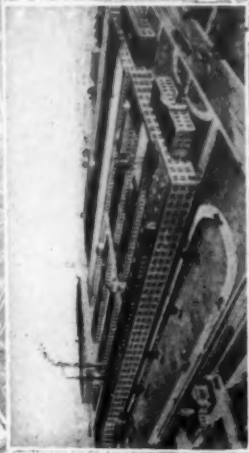
Mitchell-Lewis Motor Co.



Hudson Motor Car Co.



Buick Motor Co.



Reo Motor Car Co.



Oakland Motor Car Co.



Hupp Motor Car Co.



Studebaker Corporation

This rapidly increasing demand has only been due to the "care-free" service rendered by the bearing, with its hollow spiral roller which makes it flexible—self oiling and self cleaning.

Two books, one about motor car bearings in general for prospective purchasers, the other for automobile owners, will be sent on request.

These bearings are incorporated in the construction of every type and class of motor car from the small runabout to the ponderous heavy duty truck and the high priced luxurians.

Many automobile builders have used "Hyatt Quiet" Bearings in the axles, transmissions, etc., of their cars ever since the inception of the industry.

A literal stream of Hyatt Roller Bearings is pouring out of the big plant at Newark, N. J. into the various motor car factories of America.

The leading automobile manufacturers are using 10,000 "Hyatt Quiet" Bearings per day in the production of their cars. (This is equal to the total yearly output of some bearing factories.)

Some Prominent Users of Hyatt Roller Bearings

Pleasure Cars

- | | | | |
|----------------------------|------------------------------|-----------------------------|-----------------------------|
| Allen Motor Car Co. | Great Western Automobile Co. | McLaughlin Carriage Co. | Read Motor Car Co. |
| Alpena Motor Car Co. | Havers Motor Car Co. | Motor Car Co. | Regal Motor Car Co. |
| Ames Motor Car Co. | Henderson Motor Car Co. | Midland Motor Co. | Reo Motor Car Co. |
| Auburn Automobile Co. | Herrshoff Motor Co. | Miller Car Co. | Reo Motor Car Co. of Canada |
| Buckeye Motor Co. | Hudson Motor Car Co. | Mitchell-Lewis Motor Co. | Selden Motor Vehicle Co. |
| Buick Motor Co. | Hupp Motor Car Co. | Monarch Motor Car Co. | Spaulding Mfg. Co. |
| Calumet Motor Car Co. | Indian Motor Car Co. | Monarch Motor Car Co. | Stearns Motor Car Co. |
| Cadillac Motor Car Co. | Jackson Automobile Co. | New Dominion Motors, Ltd. | Studebaker Corp. |
| Case Motor Car Co. | King Motor Car Co. | Oakland Motor Car Co. | Stutz Motor Car Co. |
| Chalmers Motor Co. | Krit Motor Car Co. | Olds Motor Works | Tudhope Motor Car Co. |
| Chevrolet Motor Co. | Marathon Motor Wks. | Paige-Detroit Motor Car Co. | Van Motor Car Co. |
| Cincinnati Motors Mfg. Co. | Marion Motor Car Co. | Palmer Motor Car Co. | Vellie Motor Vehicle Co. |
| Cole Motor Car Co. | Maxwell Motor Co. | Palmer & Singer Mfg. Co. | Wahl Motor Co. |
| Crow Motor Car Co. | McFarlan Motor Car Co. | Patterson Co., W. A. | Willlys-Overland Co. |
| Empire Motor Car Co. | McIntyre Co., W. H. | R. C. H. Corporation | Woods Motor Vehicle Co. |
| Ford Motor Co. | | | |

Commercial Vehicles

- | | | | |
|-----------------------------|-------------------------------|---------------------------------|---------------------------|
| Argo Electric Vehicle Co. | Federal Motor Truck Co. | Mercury Mfg. Co. | Selden Motor Vehicle Co. |
| Atterbury Motor Car Co. | Fort Wayne Auto Co. | Mosul Motor Truck Co. | Smith Co., A. O. B. |
| Autocar Co. | Garford Co. | Monitor Automobile Wks. | Stearns Motor Car Co. |
| Bowling Green Motor Car Co. | General Motors Co. | Moore Co., F. L. | Stewart Iron Works |
| Buckeye Motor Co. | Gramm Motor Car Co. | Parkard Motor Car Co. | Triumph Motor Car Co. |
| Chase Motor Truck Co. | Gramm Motor Truck Co. of Can. | Petrol Motor Car Co. | Universal Motor Truck Co. |
| Chicago Pneumatic Tool Co. | International Harvester Corp. | Plymouth Motor Truck Co. | Vettrac Motor Co. |
| Commerce Motor Car Co. | Kelly Motor Truck Co. | Reliance Motor Truck Co. | Victor Motor Truck Co. |
| Comstock Carriage Co. | Kissel Motor Car Co. | Robinson-Loomis Motor Truck Co. | Willlys-Overland Co. |
| Economy Motor Car Co. | McIntyre Co., W. H. | | |

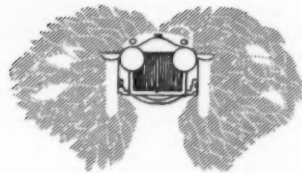
Detroit, Newark, N. J. Chicago

Hyatt Roller Bearing Co.

LEVIATHAN

By
Mary Brecht Pulver

ILLUSTRATED BY DAVID ROBINSON



IN THE spring the brown earth burgeons not alone into leaf bloom and rich verdure.

Two other crops spring up like toadstools along with the flowers on hill slopes and levels.

The first of these is the great army of spring plowmen—if we look close *boys*: boys brown, wind-beaten, stout-muscled, a little wistful, faces turned toward the sun that is only rising for them; however, we don't look close. We're going too fast for one thing. Another is they all look alike—inconsiderable, atomic; mere moving manikins in browns and rust color and blue jean.

The second crop is automobiles. For, with the first bluebird note, the clean white roads of our country, up hill or down dale, hum with the potent engine song. The bleat of the spring lamb and the shriek of the Klaxon commingle. The people who ride in these look inconsiderable, atomic also, with their wind-baked complexions and ulsters and goggles, but they differ from the other atoms in one mighty respect—they sit at Nature's banquet where the others only serve.

EVERYBODY who has sat back on padded leather and velvet springs while a 60-horsepower engine purled him like a genial south wind into the face of blue skies and robin songs and scent of wild cherry has seen what he does to such as these. He sees the patient figure of labor in the field straighten up in the sun, drop his hands from the plow handles and lift his sweating face to look after him long. If the figure is not young it may be a sardonic, or a bitter or merely curious look, but if—most likely—it is a youth, the eyes hold a deep, unconquerable longing—and, perhaps far below, a passionate resolve.

It's an experience that almost never falls of repetition until, as we fly by, these monotonous staring pygmies of field and hill coalesce into one typical man—and those long, weighing looks into a great composite Following Face that trails our passage as Clytie did the sun.

The key to the Following Face is, of course, the universal passion for luxury and speed and the soft things of life, but once in a while a pair of eyes will watch us with a different meaning. They will belong to some eager-faced boy whose sun-tanned fingers were better off in the machine shop than turning the furrow—a boy whose tremulous secret passion is mechanics and whose glance is worship.

Such a boy was Davey Hinkley plowing in his father's Southern wheat field on a soft day in April.

DAVEY came of a line of stout, prosaic farmers, with the exception of his maternal grandfather.

This granddad, more or less discredited in the family, made a genial and itinerant living by mending old clocks, sewing machines, and odds and ends of farm and house machinery. The Hinkleys disdained such practices. They seldom referred to the old man, but he left his mark, notwithstanding. He got a back thrust through Davey, whose baby fingers knew instinctively the proper way to manipulate a padlock.

At sixteen Davey's bent flourished more stoutly than before, if under limitations and rigid discouragement. He hated farming, he hated to bite the steel

into the hard earth, he hated to spread manure and cut hay, and sow and cultivate and reap and do all the endless tasks that make for farming. In a word, he was a mechanic, not a farmer. But one of the rules of the farm is to utilize home products, so Davey plowed and reaped willy-nilly, and often bitterness bloomed in his young heart as it did to-day. To tell the truth, Davey didn't know exactly what he wanted—his people told him the nearest practical use he could make of his talent was to become a good blacksmith—and this Davey scorned.

NOT wild horses nor red-hot pincers would have dragged the truth from him—that he wanted something to do with automobiles.

Five of them had passed this afternoon on the State road that ran beside the field, and after each one the frown on Davey's brow darkened. They made his fingers tingle; they made his heart yearn.

A robin trilled in a locust tree, and Prince and Charley whinnied friendly, but Davey's face did not relax. He gee'd and haw'd absent-mindedly and let his wits go wool gathering. If he were master of one of these—if the mighty engine yielded or ceased its force at his command! If he might go into its bowels and tinker with it—as he had seen men do—nay, if he might take it apart and put it together again! At this thought he plowed into his old furrow and brought himself up sharp.

Davey knew a little about cars. One of his neighbors had succumbed to the wiles of a Western mail-order catalogue and had bought a small runabout at a minimum outlay, a little one-cylinder affair, that ran around fussily saying: "Putt—putt—putt—putt—putt—putt" without getting anywhere in particular. In the face of the imperious road emperors that swept down through the country it was ridiculous, and one facetious countryman called it "Sassy Sue." The name had stuck.

The neighbor had let Davey drive it once or twice. He had let him examine (without touching) its viscera—and had placed him on friendly footing with terms like "carburetor," "shaft drive," "magneto."

Davey liked "Sassy Sue." He knew she was a poor thing. But a poor thing was better than nothing. The Hinkleys had not even a "Sassy Sue."

Presently from afar there came to Davey's ear a new yet familiar sound. He was at the road end of his line, and he leaned over the fence to watch. And what he saw made his eyes fairly bulge from his head. It was a car that was coming—yet like no car that Davey had seen as yet. He could see the rolling curves of the smooth road for a good two miles off, and the approach of any vehicle from the first. Millionaires, with the whole automobile world in their pocketbooks, had ridden past Davey's field, but none had ever come in such a creature.

IT CAME like some devil-driven incarnation of power; low, ungainly, misshapen, with its hypertrophied engine and single seat. It straddled the hills like a prehistoric monster; was here, there, on crest or hollow, in a breath. And the voice of its engine ran far ahead, in a terrible and sonorous warn-

ing. It was *The Engine*, the epitome of man and mechanics in alliance.

Palefaced, clinging to his fence, Davey watched it come—and it was upon him before he knew. Then—the mighty song stopped, sighed away like a summer breeze, there was a click of brakes, hardly a far, and with velvet softness the huge-bellied low brown Thing lay outside the fence beside him.

The young fellow at the wheel was speaking to him, but Davey did not realize for a moment; then he heard himself asked a question and he shook himself awake.

A keen-faced chap was at the wheel—the *speed* type—wiry, alert, bronzed—his visored cap worn wrong end before, and under it kindly, sharp, dark eyes. It was the kindness that made him grasp Davey's condition as he put his question; made him read the starving heart hunger in the boy's eyes. Davey told him where he'd missed the turnings to Enderport, and also told him more than was in the words.

"Like to come for a ride?" the stranger asked.

DAVEY gulped and nodded. He unhooked his horses and tied them up to the locust tree. It was anarchy to leave his plowing in midafternoon, but he climbed in without even a mental apology, the powdery loam still clinging to his rough shoes and trousers.

They were off, with a single monitory shriek of the electric siren, and the monster began its mile-eating again.

"I'm in no hurry. I'll twirl you out past Enderport and back. Ever ride in a car before?"

Davey blushed.

"Not in a real car," he said. He faltered out a few sentences concerning "Sassy Sue." But the stranger did not smile. Those little contraptions were not bad for the money, he thought—they were all right to begin on. Had Davey ever driven the little car—was he interested in cars?

Davey was. Under the easy friendliness and understanding of this new friend, the pent-up ambition of his heart flowered into speech—shy, faltering speech, but coherent enough in its central theme. Yes, he—he *liked* automobiles. And he understood a little—he knew more about "Sassy Sue" than its owner did. The monster slowed down suddenly, and Davey was introduced to the external working of the big car. The color came into his face, a new light to his eyes as he saw the ultraperfect electrical contrivances, the glorified mechanical equipment.

HIS fingers tingled with new longing. He guessed timidly a car like this cost some money. The stranger laughed and guessed it did, too—cost him a round nine thousand as it stood. Davey sank back, fainting. The engine began to purr again.

"I'll let her out a little," the driver announced, and in a second they were rushing into the country like a west wind.

A gale sang through Davey's hair, snapped past his ears, ripped the breath from his lips and struck him in the eyes. Trees flew by, houses like the flicker of a cinematograph. He tried to speak but the words died "a-borning." There were dust, a patch of dwellings,

*They rode like a storm, and he thought
that greater speed was impossible*



a railroad, all a dim composite blur, and they had skirted Enderport, left it far to the rear.

They rode like a storm, and he thought that greater speed was impossible, but suddenly his driver shouted something about "warming up a little," and in a trice they were in the heart of a cloud-burst. Nothing was visible, only a wild, rushing blackness that sang past the boy's ears, that struck him numb and dumb. It was both horrible and exquisite, but even in the blackness he lost no count of the perfect adjustment of the machine, and the poised control of the hand that governed it.

All of a sudden they ceased rushing and slowed down to a mere crawl. They were on a little stretch of road bordered by shade trees in young leaf. The driver looked at Davey, laughed, threw out his clutch and pulling out his tobacco began to roll a cigarette.

THE boy looked at him in awe.
"You—kin drive her," he said.

Apparently it was a joke, for the young fellow threw back his head and laughed aloud, showing his even white teeth and his kind brown eyes at their best. It was all the machine, he demurred. She was some car, all right. He'd driven quite a lot though, he said, and he filled Davey's ears with the names of places where he'd seen record driving done—Mineola, Indianapolis, Palm Beach, New Orleans. He'd just come up from Atlanta—just "loafing round a spell," he put it. He talked a lot about automobiles and driving generally, and Davey listened speechless, enchanted.

There were two ways to go in for automobile work. One might stay in the big shops as an expert machinist or special mechanic, or one might train to drive. Both began alike; both required the intimate knowledge that made the machine child's play under one's fingers. But if you drove there were other things needed also. You must keep in training—leave drink alone and tobacco, most of the time—and keep your nerve steady, your heart action right, and then, of course, there was a certain amount of risk, but that concerned the other fellow. Had Davey ever thought about it, driving? Davey confessed he had.

"Then my advice to you," the stranger told him, "is to keep tinkering away on that little car till you know her by heart. Backward and forward and inside out, mind. And keep your nerves healthy—and wait. In a couple of years you can go to one of the big shops and begin practical work."

IT SOUNDED like heaven and equally difficult to attain. Then because he was young, and on a holiday, and touched by the soft April weather, the stranger spoke of other matters. His holiday, he said, would end in two weeks. And his face softened as he spoke of it—he was going to be married, in fact—the week following. Some little girl, too, he added sentimentally. He took out a handsome watch and snapped back the lid for Davey.

It was a winsome face. A little wistful, with silky masses of hair. She didn't like his car, the stranger said. He'd probably have to give it up eventually. She preferred a horse, he said laughing.

Davey pretended respectful interest in the face. In his heart he felt scornful. What did any man want beside a car like this? And what sort of a girl was it who liked a horse best?

The driver began to sing careless snatches, and in between he chattered. He was due at a little country fair over here near Burnside. They weren't expecting him, he grinned, but he ate up these little free-for-all country races as he went along. Getting a little "oat money" he called it. There was usually a purse attached, and, of course, it was "nuts to Lizzie," as he said.

Shame to put the little mossy cars out of the running, though he always went in fair.

"It's like getting a present," he laughed, "she just eats 'em alive, and a doll could take her round. A doll with its hands and feet tied; why, you could drive her yourself."

He sat up suddenly and laughed again.

"Say," he said, "that's no pipe dream, boy—By George, I've a great mind—say, youngster, what d'you say? Lord, what a story—looky here—this Burnside place is only two miles off. These wagons are all pointing there, I expect," he pulled out his watch, "it's three-thirty and they mostly book for four on motors—will you do it? Lord, what a joke on the boobs. It's a pippin—it's a peach. Holy Sammy! You say you've driven that other car—"

"You mean—me drive her?" trembled Davey.

"You're on. We can have fifteen minutes for practice back on the gravel patch—"

"But—but I—my clothes—"

"We'll fix it. You take my coat and goggles and cap. I've an extra oilskin here I'll wear. I'll go in as your mechanic. My Lord, won't we string 'em!"

HE BUBBLED over at the idea and literally disrobed Davey, and packed him into his motor togs. He laughed and whistled and sang all at once, and kept reiterating something about "what the boys would say"—and altogether it seemed to be more of a joke than was apparent on the surface.

Davey, disguised, small, crouching behind the big wheel, his heart as large as a cabbage, and lodged under his Adam's apple, listened passionately to directions.

In obedience to command he started her. At first she was inclined to make spirals and there were troublesome black spots before his eyes, but after a minute the thrill of the engine sang through the wheel to his hands and got him. It was "Sassy Sue" all over, only a glorified Susan.

Involuntarily he got his grip, and his inborn mechanical sense asserted itself.

"Hold her in, son—only hold her in. She's a little hard on the bit, but she'll gentle to you like a baby—there—hold her in—steady—watch your gas—your brake now—now you've got it—now you've got it—now, oh! you're all right—it's like picking daisies—"

His monitor leaned back for a fresh cigarette, smiled as Davey skirted a big farm wagon, met and easily passed a family carryall.

"Your some little shark, infant," he laughed.

Davey didn't answer. His own engine was "knocking" hard, but the big car eased along under his hand like velvet. They turned into the Burnside fair grounds ten minutes later. It was "big day," Thursday, and to Davey's eyes all the world was gathered there, a sea of heads and shoulders. In reality it was a small "buck-saw" affair, held by the corporation of Burnside village, a plebeian panorama of side shows, lemonade booths, grandstand and clustering vehicles, through which the typical small-fair crowd wove and hummed. As the lane cleared for them Davey could feel the eye of the crowd boring into his spine.

A HORSE race was finishing, and Davey's sponsor showed him where to stop, then slipped away to make arrangements. He came back in a few minutes with the rusty-bearded, baggy-trousered, keen-eyed country trackmaster, and to him Davey gulped

out the answers he had been coached to. The man lingered a moment, a horny, appraising hand running over the tires. His eyes, like those of the crowd nearest, wore a mixture of awe and disapproval. It was much as if a winged Martian had dropped down to compete with the birdmen at Mineola—with as obvious a handicap. But after a slight hesitation they were given a number and were left alone. There was to be a restricted race first—a "warmer"—and following, the free-for-all, open to any high-powered two-passenger car. Three contestants besides themselves had already been entered, and one, a black, speedy-looking car, stood near by, its driver running a last inspecting eye over its gear. He cast sidelong glances, unloving glances at Davey's car.

"You'll have to beat that fellow. It's been his up to now—the others wouldn't have had a show—this fellow's raced a bit locally, I understand. The others are only amateurs. But don't get rattled. It's a walk-over for a doll."

Davey's friend lounged back, but Davey, as though cast in one piece with the wheel he held, waited for the signal. And all at once it seemed they had rolled out upon the track. It was not a bad track, as country tracks go—a well-kept half-mile ring—and with the black car offered certain sporting chances, or at least a sporting atmosphere, that tightened the mouth of Davey's friend, and pinched his nostrils, and sent the keen race-horse glint to his eye, but if he regretted his bizarre performance he said nothing.

"Only go slow at first until you get your head clear and the road spreads even. You'll have to get the swing of the curve, just at first. After that you can open her up and give 'em what for."

So when they had aligned in place and the signal came, Davey let them pass. They went by, even the poorest, like a thundercloud, churning up clouds of dust in his face. But he was conscious only of the car's response, and of that adjustment to his mechanic sense which must be made.

THE slowness of his start aroused a derisive yell from the crowd, but he did not heed. What a little earlier had been a sea of pale disks turned upon him fused suddenly to a blur—to nothing.

"Gas," said a voice in his ear, and he shoved it up a notch.

He was getting it now; something—was it in heart or heels?—began to bubble up with an odd singing sensation. Just ahead a blur of dust showed the hindmost car. He glanced at it a moment, then—the blur was gone.

"Good work—you're on," the man beside him cried, "Hold her in, watch your curve."

He watched. The white road ahead spread broad; rose up almost to his face—he felt the great body under him throb. A second blur of dust showed, beyond a black patch, little black dots. A sound reached him, a far-away noise like cheering. But the thunder of his engine drowned it. Suddenly the black patch widened—grew; and he had flashed past the gaping, shouting mass at the grand stand. He was even with the second patch of dust now—he got a glint of red—it was gone.

"Hold her," said the voice, "second lap, and one to go—he's on ahead there. Let him play a little—"

Davey tried to obey, but he was losing his head

Mere Tires or Real Mileage?

Which are you selling, Mr. Dealer?

YOU can sell two kinds of tires, the kind made simply to sell—and the kind made to give mileage.

The first kind will go for awhile—you may even sell a lot of them. But you must continually find new customers, a new trade. Old customers seldom come back for this kind of tire—except perhaps to complain.

The second kind is the real business builder. It appeals to the kind of motorists whom you want; it stays sold; it repeats. Old trade takes care of itself; new trade keeps rolling in steadily. In fact, in a short time the quantity of quality tires you can sell will far exceed the quantity of the other kind.

The mileage, service and satisfaction that Republic tires and tubes give, are not the result of chance, but of an honest policy of using Up-River Para and Sea Island Cotton in every tire we make. These materials naturally raise the cost of Republics, but they give a service to the motorist that cheaper materials cannot possibly yield.

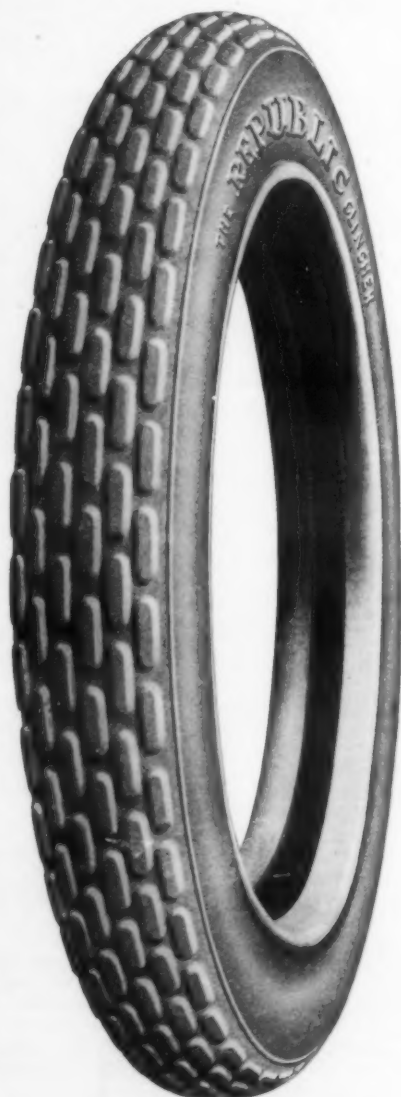
The Staggard Tread Non-Skid is the original and only effective non-skid tire bearing patent dates. It is the thoroughbred of tireedom, the world's greatest producer of mileage.

The Republic Smooth Tread contains the same high grade materials, is produced by the same skilled workmanship and today is preeminently the leader among smooth treads.

So great has been the demand for a non-skid tire (lighter and not quite as expensive as the Staggard Tread Republics, but at the same time bearing Republic quality) that we have put on the market a new candidate for public favor, the "W M", shown below. This latest addition to the Republic family already has received a hearty welcome from the owners of Fords and cars of a similar type who have long wanted a tire of this character. Dealers will appreciate the ready sale for this new mileage maker.

Our 1914 literature tells all about these wonderful tires. Send for it or call on our nearest branch or agency.

THE REPUBLIC RUBBER COMPANY
Factories: Youngstown, Ohio



Republic Staggard Tread
Pat. Sept. 15-22, 1908

REPUBLIC PLAIN AND STAGGARD TREAD MILEAGE

Republic Quality Branches and Agencies

The Republic Rubber Co. Atlanta, Ga.	H. Tysinger Little Rock, Ark.
Robertson Tire & Auto Co. Birmingham, Ala.	Republic Rubber Co. of Cal. Los Angeles, Cal.
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	The E. A. Wick Rubber Co. Youngstown, Ohio

and leading dealers everywhere



The New
"W M" Tread

now. The mighty engine, as if impatient, fought angrily at restraint. The wind lifted his hair, burned on his icy cheek. In spite of himself he pushed her. The gray patch ahead was not so far now—

SHE could do it—easily. He felt it in every fiber. Why, then, let this mocking black imp ahead taunt them? Suddenly words scorched his ear: "Sock it to him."

Davey socked it. With a mighty bellow the great engine hurled them on. They came on neck and neck—there was a gray blur—dust in his mouth—a shouting black mass—they were alone.

The road looked gray now; the pigmy dancing figures he had seen vanished. They seemed to be suspended in midair, rushing with incredible fury over an endless curving spiral. Suddenly he felt a fury of irritation. He had passed them all. What did this mean—this car ahead—another? And the black mass again and a sound of shouting—

He was conscious now of a furious racket in his ears—his rigid arm felt a viselike clutch. He slowed down slightly—"Good Lord!—how many times do you win—we've lapped her twice—"

They had to back a quarter mile. Davey in a strange, weak sweat wilted down behind his wheel.

Down in front of the grand stand there was shouting. A pigmy figure—a normal-sized man—suddenly was shouting through a megaphone.

He tried to listen, but the words blurred. A crowd formed about them, and a man detached himself and came up with a sheaf of bills.

"It's a fifty-dollar purse—stick out your hand—" Davey obeyed.

"He's all in," said some one. "Lord, that's a devil of a car—and ain't he a young bird?"

ONE or two would have made conversation, but Davey's friend waved them aside.

"We're in a hurry," he said; "I'll tool her out—" Davey slipped into his own seat feebly. He couldn't have toolled a brace of sparrows.

It took him some time to fight back to normal, and the other left him to readjust himself in peace.

They were nearly home before he spoke.

"Half of those makin's are for you—I'll take the other half and get Mamie a knickknack. But you get half. You did well." The color rose in Davey's cheeks.

"Me—get twenty-five dollars—but it's yours—your car—"

"You drove her. You can use it as a nest egg, son. It'll be a little start—a little souvenir so you won't forget me—" Davey turned the shy, eloquent eyes of a dog on him.

"My name's Eddie Leroy," the other went on. He waited the briefest second. It was a big name in the racing world, but Davey's face showed no enlightenment. With a little chuckle, Leroy pulled out a card. "This," said he, "has the address of the biggest training shop in the country. When your nest egg's grown big enough you may want to use it. You can tell them I sent you. They know me—"

"He's all in," said some one.
"Lord, that's a devil of a car
—and ain't he a young bird?"

Davey took it and tried to thank him—but a queer lump stuck in his throat. Leroy seemed to understand, he clapped Davey on the back and called him "a great old shark."

They were at Davey's field now and the boy got down beside the stone wall. It was over in a minute. The swift jar of a released brake—a quick backward smile—and the vanishing hum of a motor. Davey stumbled over the wall. His work was just as he had left it—and it was the same place. The same locust tree—the same plow—the same broken earth. But he himself—

SEVERAL days later Davey sat on the porch in the cool evening listening to Abe Ellsinger and his father talking. Abe was the owner of "Sassy Sue" and had returned from a week's tour of local points. He was relating the glories of various fairs he had visited. Martinsville fair he said was the biggest and finest in years. There had been wonderful racing, although he had seen good races at some of the others—Chattam, Williamsville, and Burnside. Yes, Burnside especially. Davey's heart gave a sickening thud and seemed to turn over. "Burnside! You were there at the fair?" he asked in a queer, thin voice.

"You bet I was. I was there for Thursday's race—the big race—that one that Ed Leroy's car won. Say, that sure was a corker. The Enderport 'News' has the whole thing," he pulled a weekly paper from his pocket, "a column and a half, almost. Gives the whole record of Leroy an' his career—an' his car. Say, that's a crackajack car, funny name though the paper gives it," he smoothed the paper with careful fingers, "'a big brown Lee-vi-a-than,'" he spelled carefully, "I never heard tell o' that make though. My Lord, they're all puffed up because Leroy dropped in and licked 'em"—and to the best of his ability Abe gave the details of that day's track work as he had seen it. He finished it with the newspaper account.

The older man listened, intent and interested, but Davey sat like one frozen. It seemed to him there was something sinister in Abe's having been there; more than that his very manner now held some secret import. Once he would have sworn Abe winked across at him. "I'd like to have seen it," said Hinkley senior when Abe had finished.

"You would," said Abe, "an' 'specially if what I heard at Martinsville's true. They say Leroy told it himself—thought it was a great joke. I bet they'll be some soreheads over Burnside way when they find out."

"Find out—what?"

"That Leroy didn't win that race at Burnside. He didn't drive that car at all. All this here puff's about somebody else. It was a boy that run his car—a green farm boy, he says—a young little pup."

"Get out—I don't believe it."

"Fact though, I was there myself. I kin prove it." "How would you?" asked Hinkley, "you don't know Leroy."

"No—" said Abe quietly, "but I know the party that drove. I knew him at once when they got out on the track." Davey bent over suddenly and pulled some blades of grass.

"Who was he?" asked his father, and the boy listened shrinking.

Abe pulled at his pipe, blew out a cloud of smoke and spat. "I know him well," he repeated almost dreamily, "but I never guessed more'n anyone would what's in him. But he's got the makin's of a big driver—Leroy tells it himself. A holy wonder he calls him. If he gits a chance he'll make big money some day. They tell me Leroy makes thirty thousand a year or more. When I see him again—this youngster—I'm agoin' to tell him 'Sassy Sue's' his to practice on if he wants—all he's a mind to. He ain't got the chance at home, you see. He farms with his paw an' they ain't got a machine."

"Good Lord!" cried Hinkley, "his daddy must be a plumb fool."

"Is—in some things. Though I expect they've never talked things over much."

"Somebody'd ought to tell him then," said the other, "it's wastin' money—working on a farm if he can do like that."

"If that's your view—" said Abe, "I believe I forgot to tell you his name. I'll make you acquainted now. Party sits beside you there, name of Hinkley."

DAVEY threw up his hand as though at a blow, but his father did not move. Then the color mounted slowly into his face as he looked from one to another. "I—I—it ain't so," he said. "I can't—you don't mean—not you!"

The boy's face was white—full of both hope and misery. "He stopped when I was plowin'," he gulped. "He asked would I come fer a ride. An' we went over to Burnside."

"An'—you drove—you won that race for him?"

Davey nodded. His father's eyes were on him as though they had never seen him before. There was bewilderment, incredulous amaze, almost awe in them.

Abe broke the tension. He got up and yawned discreetly. "I got to mosey along," he said. "Just thought I'd drop in an' congratulate you. An' I meant what I said—about 'Sassy Sue.' She's yours to monkey with whenever you like."

But Davey's father came out of his trance quickly.

"You and your 'Sassy Sue'!" he cried, "you trade her fer a new cream separator. It's all she's worth. Do you think you kin engineer things fer my son? If Davey—if he's goin' to be like that—if that's why them fingers of his is so handy with a wrench, he'll git him a car—a real one. I got fifteen hundred layin' loose just now, an' I'm willin' to spend real money. We'll git him somethin' fer a thousand or so. After a while—if he wants, he kin go away and get learned proper—what do you say, boy?"

BUT Davey could not say. He had struggled to his feet and faced his father, his mouth working cruelly. "I—I—" he began in a strangling voice. Suddenly he turned and ran ignominiously head down for the dark, inviting sanctuary of the orchard.

Behind he could hear the men's laughter ring out—indulgent, understanding laughter.

Presently he heard them talking again, his father's voice in eager questioning. He lifted his head from the rough fence and fumbled for his handkerchief.

Overhead a star was shining; a little breeze stirred the trees; in the distance "peepers" sang. Suddenly there was another sound—a siren on the distant State road. Every fiber thrilled to it—thrilled with the happy knowledge of that new world wherein his feet were to find their chosen way.



Plant No. 2

Wagner, Quality

*The
Sterling Mark
of the Electrical World*

Plant number 1

The engineering ability behind the Wagner Starter.

The essentials of an automobile starter—a motor, a generator and a storage battery—are the same in all starters. The difference lies in how well they have been made, and how suitably they have been adapted to their work. The efficiency of a starter, therefore, depends upon the experi-

ence and ability of the maker. The Wagner Starter is made by electrical engineering experts, who have to their credit a record of 23 years of achievement in developing and manufacturing motors—both single-phase and poly-phase—generators, rectifiers, transformers, and electrical instruments of precision.

The name Wagner on any of these things is equivalent to the Sterling mark on silver.

When the Wagner Company began to manufacture starters it naturally followed that they would excel in them just as they excel in motors and generators, the principal factors of a starter.

The Wagner Starter

is a combination of a Wagner motor, a Wagner generator, and Wagner engineering ability to make these two factors do perfect work when connected to a storage battery and an automobile engine.

Every Wagner Starter is built to order. It was

designed especially for the particular car it equips. Every requirement for cranking that car was carefully measured and a Wagner Starter was built, that is precisely the starter which that car needs.

Then it was tested in every possible way to prove its effi-

ciency under the worst conditions. That is the thoroughness behind Wagner, Quality.

When you are shown a car that is cranked with a Wagner Starter you may be sure that the maker of that car has provided you with the best starter that can be put on his car.

If you are interested in starters ask any agent of a Wagner Started car for a demonstration of Wagner efficiency. Also write for our book, "The Starter that is made to order." If you are interested in motors and other Wagner, Quality products, and the Wagner service behind them, confer with the nearest Wagner Branch and Service Station, or write

Wagner Electric Manufacturing Co. St. Louis, U.S.A.

Factory Branches with Fully Equipped Service Stations (Boston, New York, Montreal, Philadelphia, Buffalo, Pittsburgh, Cleveland, Detroit, Cincinnati, Chicago, St. Louis, Kansas City, San Francisco, Los Angeles.)

SELLING AGENCIES: Minneapolis, Denver, Salt Lake City, Seattle.

RECTIFIER FOR CHARGING SMALL BATTERIES

SWITCH BOARD TYPE INDICATING INSTRUMENT

SINGLE-PHASE MOTOR

POLY-PHASE MOTOR THE "PUBLIC SERVANT"

SINGLE-PHASE CONVERTER FOR CHARGING ELECTRIC VEHICLES AND MOVING PICTURE PROJECTORS

ELECTRIC VEHICLE MOTOR

ALTERNATING CURRENT GENERATOR

TRANSFORMERS

SQUIRREL CAGE MOTOR

UNITY POWER-FACTOR MOTOR SINGLE-PHASE



SUPPOSE you were approaching a village in your automobile and saw a sign like the one heading this article, wouldn't you instinctively cut off the power through inherent respect for gentlemen who expressed their wishes in such courteous terms? I did, though when I saw it the first time sheer astonishment at the unusual phraseology may have had something to do with it. And if you should read on the back of a similar sign which you approached as you were driving out of town the courteous acknowledgment "Thank you," wouldn't it warm the cockles of your heart? The brain that conceived that sign had a keener knowledge of human nature than is usual among town fathers. The series of beautiful villages which adopted this scheme "built wiser than they knew," perhaps, for, aside from winning respect for their speed regulations, they called favorable attention to themselves, and the passing visitor carried away with him a vision of well-kept lawns, clean streets, and hospitality. I have toured largely over the United States, and from ocean to ocean, but the pretty villages whose signs spoke to me so kindly live in my memory as oases of good-fellowship in a desert of graft on the traveler.

Town Signs and Town Character

MANY signs speak loudly of the character of the men behind local government, labeling them unmistakably as grafters, and that, too, of the most clumsy type. It is obvious that they are actuated more by the fines they collect than by the desire to protect the infrequent pedestrian of their "streets." It is not uncommon to see signs: "Speed limit six miles an hour," or "\$50 fine for driving faster than a walk through this town." But the limit of idiosyncrasy appeared in the country on a board placed, we thought, as a joke; but rounding a bend in the timber-bordered road we came upon three or four houses, one of which was a store, although there was no one in sight. The sign read: "You will be arrested and fined \$100 if you drive through this town faster than two miles an hour." As we rounded the turn, a tall, bulky man with a slouch hat stepped down off the store porch and held up his hand, at the same time pointing to a tin star on his coat. I opened the muffler, increasing the speed as I went. That particular motor makes a terrifying noise—the man may be running wild in the timber yet for all I know. For too long a time the automobilist was looked upon as a legitimate subject of robbery. Happily this is passing, or, more properly, the businesses which touch automobilism are gradually eliminating the dishonest and corrupt.

Guile and Kindliness

IT'S a long cry from "two miles an hour" to the thirty miles an hour which is the predominant speed in New York and Chicago, where, if one drove as slowly as the laws require, the police would be after one instantly for obstructing the streets. It's the speed of the automobile that keeps the streets free of congestion. Try twelve miles an hour, if you dare, at Forty-fourth Street and Broadway, New York, where five policemen are on duty from six until nine o'clock of evenings.

But all the graft is not in the town. One day last summer we crossed a large river, paying 25 cents to the ferryman. About an hour's ride farther up the road we recrossed the river on another ferry because the sign said that the county bridge, which was in sight about a mile above, was impassable. When we were almost over a ferry charge of \$2 was demanded. This was so obviously unfair that, suspecting graft, we turned out of the way to visit the bridge. We found the bridge in excellent condition, but a few planks had been removed from near the end and a barrier erected across the road. Subsequently we learned that the county commissioners owned the ferry.

We used to see signs which read like this: "State line. Charge tags here." That was when many States grafted on their neighbors and visitors, although it is only fair to say that this condition existed nowhere except in the effete East. These signs, however, are now obsolete. Maryland is the only State which still disgraces herself by requiring her neighbors to buy a \$10 to \$15 admission ticket to visit in her Common-

Signs on the Big Road

By
C. Francis Jenkins

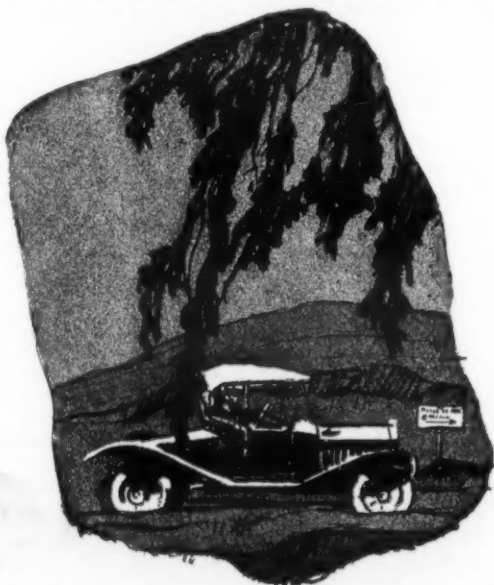
ILLUSTRATED BY C. B. FALLS

wealth. The warning signs erected along what we are accustomed to call our public "roads" are living lessons in human nature. Some are officially established and are cold and matter of fact, and you pass them with a glance for the information and no further thought.

Then again you approach a fork in the road, perhaps, and in doubt you try to sense the right road to take, when suddenly you discover a small, crudely made sign properly directing you, and you conjure up a vision of a kindly old farmer in jeans and a hickory shirt sitting in the woodshed door laboriously fashioning the letters and the arrow which are to help the stranger on his way. And your estimate of your fellow man takes a boost.

A sign now gone from almost all roads is "Toll-gate," hung to an old well sweep across the road—a sign of the private ownership of a public road, which is usually a surprising discovery to the younger generation of to-day. These roads were useful in their day, perhaps, when one might take of public domain about as one pleased, but to-day they usually indicate bad roads.

A conspicuous object which we one day discovered in the Virginia mountains was an immense water-melon in the front yard of a mountaineer's cabin.



We stopped and inquired if we might buy it. He "reckoned it was worth 10 cents." We gave him a half dollar, and while eating the melon we chatted with the man and with his barefooted wife: two grown-up daughters, also unshod and shy, listened. When the woman discovered that we were from Washington, D. C., she remarked: "Gee, I should think you-uns 'ud be lonesome livin' so far away." Her point of view came to us as a shock.

The Reminder above the Bucket

IREMEMBER another sign which formed a mental picture of another kindly, though rough, character. This time he was doubtless dressed in chaps, spurs, and wide-brimmed peaked hat, with a red bandanna around his neck. We had been following a trail over the great barren plains of the Middle West, and had been driving perhaps three hours without a sign of human habitation, when suddenly we came upon a spring of water with a post planted beside it. A nail had been driven in the post near the top, and on the



nail hung a bucket. It seems that some of the recipients of the good Samaritan's kindness were thoughtless, for a board with an inscription had been nailed to the post above the bucket, gently to remind them of their obligation to their fellows. It read: "Damn you, hang up the bucket."

The bucket was hanging when we arrived—and it was hanging when we left.

On the wide expanse of our great plains material for signs is scarce, and ingenuity often suggests odd solutions of the difficulty. At the crossing of a trail in Colorado we found the directions which we were in need of written on the bleached skull of a buffalo. One horn had been stuck into the ground to hold it where it belonged.

At another time we found our directions printed on the side of a square, five-gallon gasoline can, a receptacle in which practically all gasoline is obtained in that part of the country. The can had been filled with stones to keep it located. Occasionally the needed information was found carved in the sandstone of a bluff.

But a good road sense is a fortunate possession when one comes to a crossroad or a fork and finds no sign, or finds that the sign has fallen, or has been set up in such fashion as to leave a doubt in the mind of the stranger. I think the worst case of the kind encountered was when we had traveled ninety miles since passing the last house, and the town we should next pass through was believed to be as far ahead. Which trail should we take? Almost a case of "the lady or the tiger," but fortune was kind and we took the right one.

The Boon of Water

IT IS not generally known to Easterners that under the laws of most of our Western States one may flag and stop any railway train anywhere for needed water and food. Such discovery brings forcibly home to one that water is the West's one great want. When it can be obtained "the desert blossoms as the rose." So water holes are highly prized, and have been the cause of many bloody conflicts between rival sheep and cattle men as well as settlers. But even a water hole may demonstrate the brotherhood of man, for on occasions one will find a lowly sign with an arrow, pointing at right angles to the trail perhaps, and marked: "Water, 130 paces."

On occasions a sign may be found to be a delusion and a snare, as we discovered one noon. On the front of one of four or five buildings we could read while yet at quite a distance: "Restaurant, Meals 25 cents." We were hungry and speeded into "town" with visions of a warm meal, only to find that the place was absolutely deserted, not a living soul within perhaps a hundred miles of the place. So we were compelled to resort again to our box lunch.

On one trip we went into Salt Lake City over the old Mormon trail just sixty-four years to a day after the ox teams had passed under the natural arch at the foot of the cañon, though at considerably more than ten times the speed, as we discovered next day, for on a buffalo skull reposing in a glass case in the Chamber of Commerce rooms, found and brought in off the trail some time before, we read this legend:

*Made fifteen miles to-day.
All well, Brigham Young.*

Certainly some of the earliest signs set in the new country are the iron signs along the old trail connecting the monasteries established by the monks who explored the Pacific Coast country as far north as San Francisco. These old signs have holes punched therein to form the letters, and are mounted on iron posts, the graceful curving tops of which support a miniature monastery bell.

Automobile Clubs on the Job

THE East and Middle West are now fairly well "signed up" on the main roads between the principal cities by the cooperation of local automobile clubs. If this cooperative work were extended between the cities of the West and Middle West it would prove a great boon to the small army of tourists who will drive to San Francisco in 1915.



Talk with the man who rides on TIMKENS

YOU can't know too much about the motor-car—the one you own or the one you expect to buy.

Timken advertisements have told you about the foundations of the car—the axles and bearings. They have told you how two great Timken organizations are devoting themselves solely to the tasks and ideals of building the axles and the bearings that will give the best possible service in motor-cars, pleasure and commercial.

And you know that it is not what the *maker* says about his products, but what *users* say about the *performance* of those products that makes or breaks their reputation.

Sincere advertising pays. We believe in it and in the big definite objects of Timken advertising. Have you wondered what those objects are?

Timken Axles and Bearings are not in any sense "accessories." They are important *integral parts* of the car and can be sold only to car manufacturers. There exist in the United States not more than 150 car makers who can be possible Timken customers.

ONE great object of Timken advertising is to emphasize the obvious fact that cars which are to give lasting satisfactory service *must be built of the right parts*. Right foundations—axles and bearings; right motor, steering mechanism, springs—right every part.

And these right parts must be rightly "engineered" into the car by the combined efforts of the engineers who design the car and the engineers who design the integral parts.

Emphasizing these facts helps the whole motor-car industry.

We believe the public will reward all of us makers of axles, of bearings, of other parts and of complete cars who are sincerely striving to put the utmost use-service-value into our products.

ANOTHER object is to so *widen* the existing good reputation of Timken Axles and Bearings that they will have, in addition to their service value to the car owner, a distinct selling value to the car manufacturer. Knowing, as you and we do, that a *lasting* selling value can exist only where the truth is told and can be proved.

Widening the good reputation of Timken Bearings and Axles will, we believe, render a real service to car buyers—because Timken Axles and Bearings are standing up to the test of everyday use; a real service to dealers and manufacturers—because selling *real* values is their problem; and a real service to ourselves—because our future business success depends on the success of users, dealers and makers of Timken-equipped motor-cars.

THUS you have the main objects beneath all Timken advertising. And to accomplish those underlying objects each individual advertisement aims to induce you to talk with the man—there are thousands of him, everywhere—the man who rides on Timkens.

Those of you who ride on Timken Bearings and Axles know what service they render. Tell it, we urge you, tell it to others—for their benefit.

And you who are going to buy cars, ask about the day-after-day and year-after-year service Timken Axles and Bearings are giving. Ask, for your own benefit.

WHILE earnestly trying to build the axles and the bearings that will give the best account of themselves in use we recognize you, the car owners, as the court of final appeal. Our whole future success depends upon your verdict. If now or in the future you find that other axles or other bearings are giving better service than Timkens we not only expect, but advise, you to give them your support.

It is only because of our supreme faith in our ideals and our products, axles and bearings, that we dare ask you—for your own information and benefit, to talk with the man who rides on Timkens.

The reasons back of our confidence in your verdict are given in the Timken Primers, B-1 "On the Care and Character of Bearings" and B-2 "On the Anatomy of Automobile Axles." Sent free, postpaid, on request to either company.



THE TIMKEN ROLLER BEARING CO., CANTON, OHIO
THE TIMKEN-DETROIT AXLE CO., DETROIT, MICH.



TIMKEN

BEARINGS & AXLES

The Power Wagon

By Rollin W. Hutchinson, Jr.

THE history of all transportation, passenger and freight, whether by road, rail, or water, shows three important stages

—the romantic, the useful, and the indispensable. Six years ago the passenger auto's younger brother (younger only in the sense of commercial application), the autotruck, was in its romantic phase. The majority of merchants who had the temerity to invest in the noisy, clumsy, undependable, freight-carrying autos of that day did so, not with the expectation of direct economies or profit from their use, but with the idea that indirectly, through the publicity which the passage of the strange contraptions through the streets, bearing conspicuously their name and business, would gain for them, their trade would increase. Ten years ago an autotruck attracted a bigger crowd than a suffragette parade on Fifth Avenue, New York, does to-day.

In this short commercial history of ten years the motor truck has passed into the useful stage for nearly four hundred different lines of trade in which it has been introduced. Many thousands of its owners would to-day declare it indispensable for their very business existence, for by the time this article is published there will be upward of 80,000 of the new freighters, each carrying the gospel of the new régime of efficiency in highway commercial transportation. In 1913 the new transportation tool gained in numerical strength by over 30,000 vehicles going into service—an increase in one year equal to two-thirds of all previous years combined, being 50,000, approximately, at the end of the year 1912. No, the new freighter has not really arrived, numerically considered, as these 80,000-odd trucks have only emancipated some 360,000 of the 25,000,000-odd horses, figuring that each power wagon replaces on the average four and a half horses. But when one reflects seriously upon the stupendous problem that has confronted the new freight-transportation institution in competing with the horse, that for hundreds of centuries before the Christian era fixed the "horse habit" upon the human mind, it is a wonderful growth that the really infantile art of commercial motor road transportation has seen.

The Truck Eliminating the Horse

IF WE estimate the rate of increase for the next ten years at a fixed ratio of two-thirds of the total number of motors in service at the end of each previous year, we can confidently predict that in ten years there will be 1,000,000 freight-carrying autos in the United States; and the horse, except in circus parades and as a stuffed curiosity of the museum, will have disappeared from urban communities. And those of us then alive will compare the mortality tables of cities and exclaim: "Shades of Æsculapius! doctors and sanitarians back in 1913 were a lot of ignoramuses. Our mortality rate is only half per thousand what it was in those days," little dreaming that the disappearance of the two greatest purveyors of disease in city and country as well, the horse and the house fly, were the fundamental causes for the hygienic betterment of cities.

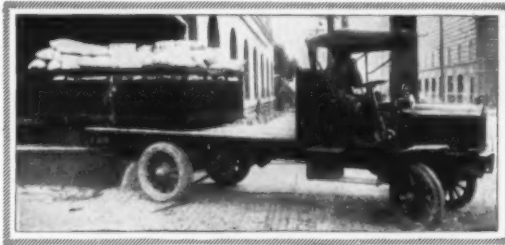
The past year has been one of marvelous strides forward in the mechanical evolution of the motor truck. Until recently its sponsors had not fully concluded that a motor truck and a pleasure car were not of the same stripe. They were still striving to build a pleasure-car chassis heavier in this part and larger in that, mount some sort of a truck-type body on it and call it a commercial vehicle. But that is all past. No one will seriously argue to-day that a pleasure automobile can be successfully made into a

WASTE

ONE OF NEW YORK'S large transportation companies last summer found its gasoline bill out of all proportion to the distances covered and yet could find no dishonesty on the part of any of its employees. It decided to teach all its drivers the rudiments of gas-engine theories and the ways of handling a car without forcing great quantities of unnecessary "gas" into the cylinders. In a month after the instructions had been given the company's gasoline bill dropped 75 per cent—which means that even if the price of gasoline should be doubled, a saving of 40 per cent would still be effected over the former cost. In a report based upon a series of investigations in New York City during the early part of 1913, the Society of Automobile Engineers showed that a great number of cars and trucks emit as high as 10 per cent of CO (carbon monoxide), representing a loss of fully 40 per cent of the fuel fed into the motor

delivery vehicle save in the spirit of makeshift, and the business public has grown too wise to buy makeshifts. Motor-truck engineering has not attained perfection as yet, but it is rapidly approaching a practical nearness to it. The feature of greatest promise for the stability of the motor-truck industry is that manufacturers are beginning to build trucks right and not simply to sell in the easiest way. They have learned that they are held responsible for the performance of the truck, and that good performance means larger and quicker adoption of motor trucks.

Mechanical progress in gasoline-driven trucks has been chiefly marked as a concrete whole in the evo-



A type of demountable body used in the retail grocery trade. It slides into position on the platform of the truck

lution of the "greyhound type," in contradistinction to the "bulldog type" of the earlier years. American builders have been giving their customers trucks with a great deal of useless weight to them, all because of the demand for excessive speed and overload capacity. But now the truck user is discovering that excessive speed in a truck is expensive and is not practical, just as the steamship companies discovered that twenty-two-knot freighters did not pay, and railway companies learned that sixty-mile freight trains were not dividend earners. The lightweight truck has everything in its favor and nothing against it. It is easier on tires, consumes less fuel, requires less frequent repairs, and gives more efficiency with the same motor power. The truck operator is beginning to understand the increase in weight made necessary by the increase in speed. The ratio of increase must be greater as the speed increases. This is because the strains developed by a truck running twenty miles per hour against one running fifteen miles per hour are far greater in proportion, even if they are of the same weight. The "greyhound type" of truck is approaching uniformity of design. The fact that gasoline has increased in price 250 per cent in two years partially explains its hard-by era of popularity.

Kerosene as a Money Saver

IT COSTS money to haul around dead weight, and, besides, tire mileage on a truck whose chassis weighs 8,500 pounds may be as high as 50 per cent greater than the same capacity truck weighing 6,500 pounds. The heavier truck is harder to handle, too, and road shocks pound its useful life out much quicker than they do the lightweight truck, in which engineer and metallurgist have coordinated their brains in selecting and proportioning the wonderful new ferro steels, so that the assembled whole has all the strength of the bulldog type and greater resistance to wear, greater efficiency and economy, because it carries not a pound of useless weight.

Science in the past year has had to combat the Fuel Trust, which is one of the worst enemies of the gasoline truck to-day. But, as in all other me-

chanical industries, necessity has been the mother of invention, and science is routing the Fuel Trust bugbear in three ways—by lightweight design, as above discussed; by improving the gasoline engine so that, despite the "watering of fuel," as supply and demand laws or what not decrease the quantity available, it burns the same fuel per mile; and by bringing into existence vaporizing devices or carburetors that burn kerosene, distillate (an intermediate hydrocarbon between gasoline and kerosene), and other heavier liquids than gasoline.

As great in importance as was the trend in 1913 toward the lightweight truck and in details of mechanical refinement, the rapid developments in carbureting kerosene were even greater in their ultimate bearing upon the future existence of the power-wagon industry. They brought the era of the successful kerosene-burning truck so close to hand that, before the year 1914 has passed, practically all gasoline trucks not over four years of age can, by a mere change of carburetors, start out on a new era of economy such as the ultrapessimists of the "fuel problem of trucks" admit will banish to the limbo of forgotten things the fuel peril of power wagons. Burning gasoline to deliver a ton of freight with a saving of 25 to 75 per cent over horse vehicles did not bother autotruck users three years ago; and even with gasoline at 20 cents the fuel item is one of the least significant of the items entering into gasoline-truck operation.

Cooperation of Maker and Buyer

THE electric-driven truck, too, has been refined in some of its mechanical as well as its electrical features, and to-day is a splendidly flexible, efficient, and economical type of autotruck. The radius of action of the electric truck has increased nearly 15 per cent in a year, due to rapid developments in both the lead-sulphuric acid and the nickel-iron (Edison) type of batteries. Battery improvements have increased the average mileage of the electric truck on one charge to thirty-five or forty miles as an average, and the fifty or sixty mile radius electric is not an uncommon reality. Its increasing radius means its increasing encroachments on the field of the internal-combustion truck. But the great struggle which was popularly supposed to exist between the gasoline and electric is developing into teamwork. Each has points of superiority over the other for certain classes of work, but their partisans have recently come into more or less accord, so that the most effective career of both will be as allies rather than as competitors. Manufacturers of both types commonly admit that many business firms must possess types of both vehicles to have a truly successful motor-delivery system, and it is a creditable characteristic of the business honor of some that they will refuse the profit, not from the sale of one truck, but a squadron of trucks, when they are certain that theirs is not the power which the operating conditions of the customer demand.

In 1913 a remarkable evolution in the merchandising phase of the industry was made, characterized by a near approach to the "getting together" spirit between buyer and seller. Slowly, but surely, maker, salesman, and buyer are coming into a realization of the fact that their own best interests lie along cooperative rather than antagonistic lines. Vital questions like guarantees, maintenance, intelligent use, and the necessity for educational work among drivers are coming to be recognized as of mutual concern and not the sole responsibility of either. Makers and



Unloading 700-pound slabs of cut stone from one of the giant power wagons used in the building trade
Jan. 10



How time and money are saved in the lumber industry by means of the motor truck and an auxiliary loading device



It is plain now what the public wanted

Four \$1550

A light car of quality—powerful, staunch and fast, yet comfortable—Jeffery built it. We have accomplished in the Jeffery Four and Six that which all motor car designers have either overlooked or striven *for in vain*.

Good mechanics know that the day of the big, lumbering car is gone—the great fuel wasting, giant motors and terrific tire expense.

True, the public has bought and used such cars—in fact, two years have passed without progress toward economy and efficiency. The only changes have been in equipment and body design.

The public waited, and cars just grew heavier and heavier—no better. The majority, in self defense, bought cheap cars—not because they were good, but because they were light and economical. Quality was lacking, of course, and comfort—out of the question.

Then came the Jeffery Four and Six, each dominant in its class. Designed alike and representing the latest foreign and American practice.

The leading American and foreign engineers had forecast such cars for 1916, but Jeffery did not wait. No one thought the

new and ultimate type would come quite yet—and at such a price.

They counted without the public. They thought the American people demanded bulk, great size and wasted power. They counted without Jeffery, as the history of four eventful weeks will show.

Early in November the Jeffery Four and Six were announced.

Then came the demand. Telegrams from dealers selling other cars; good offers from big organizations willing to place orders for hundreds of cars. Then thousands of inquiries from prospective buyers and a flood of applications from salesmen wanting jobs.

The result? A five million dollar plant running night and day to produce the goods. But there will be no trouble about deliveries. The thousands that want Jeffery cars can get them because a plant like the Jeffery can produce them.

Now, just what did the public want?

They wanted what we have produced in the Jeffery Four. A high speed, light, mono-bloc motor, $3\frac{3}{4} \times 5\frac{1}{4}$, counted not large in this country where many have been taught to measure horse-power by engine bulk instead of engine speed.

Yet, it is a big fellow when placed side by side with the great majority of the motors shown last month at the Paris show. Fifty-two out of eighty-six cars shown had smaller motors.

The public wanted the latest body—a Rothschild body. Not a streamline body, remember—but two years in advance of the design now used on so many cheaper cars.

The Lancia brought this design to the Paris show when streamline was popular and it caught the crowd. Rothschild took it to New York and Jeffery introduced it to the American public.

You know the rest. You've heard it talked on the streets—the highest grade car in its class in America.

The specifications tell the story

U. S. L. starting and lighting, without chains, gears or belts. Imported annular ball bearings. Speed it up to forty miles an hour, shut off your engine and coast half a mile.

Spicer universal joints, combination force feed and splash oiling system; four forward speed transmission—the lightest and easiest to operate.

High grade full floating type rear axle on imported annular ball bearings—a delight to the mechanic. Flexible leather coupling between clutch and transmission.

Vanadium steel in springs, rear axle drive shafts and front axle.

Rayfield carburetor; left drive and center control. Pressure feed gasoline tank; pump operated through cam shaft. Bosch Duplex ignition. Solar lamps with dimmer, operated by four position switch.

The Jeffery Four equipment includes Never-leak top, rain-vision windshield, Stewart-Warner speedometer, ammeter, extra demountable rim, with carrier; electrically lighted dash replete with latest attachments. Klaxet horn and complete tool equipment.

Do you want the book?

The Jeffery is a car that will delight the mechanic who takes pride in high grade materials and efficient design.

We have a booklet which will interest the mechanic or the layman. It's an unusual story, revealing some facts about motor cars that any mechanic might tell you in confidence.

Clip the coupon below and get the book.

THE THOMAS B. JEFFERY COMPANY
Kenosha, Wis.

I want that book which you call
"The Mechanic's Ideal Car."

Name _____

Street _____

City and State _____

The Jeffery Six weighs 3700 pounds, with full equipment, motor $3\frac{3}{4} \times 5\frac{1}{4}$, 48 horse-power, Bosch Duplex ignition; wheel base 128 inches; wheels $36 \times 4\frac{1}{2}$ and on enclosed cars 37×5 . Rayfield carburetor; Warner autometer, ammeter, engine driven power tire pump, Rothschild body and full floating rear axle.

Five passenger touring, or two passenger Roadster, \$2250. Six passenger, \$2300. Sedan five passenger, \$3250. Limousine, \$3700.

If it's in the Jeffery
It's High Grade

The Thomas B. Jeffery Company
Main Office and Works, Kenosha, Wisconsin



The Jeffery Four. From nothing to forty miles in twenty seconds.

owners are getting better acquainted with motor trucks; what they will do and what they will not do. Experienced owners of trucks agree that the best truck in the world will be a failure in the hands of an unintelligent or abusive driver, likewise that the least efficient truck under the direction of a careful driver and garage man may give a good account of itself. The result of this common discovery of buyer and seller is being demonstrated in a desire to commence cooperation for the common end of making the power wagon what it should be.

Put the Right Driver on the Seat

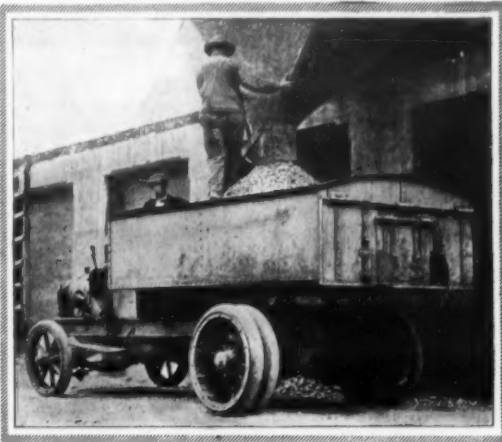
THE selection of the right truck built by the right company is no longer a difficult task; but the uncertainties incident to putting the right man in the driver's seat is to-day the biggest deterrent to the more extensive use of power wagons. The motor-truck industry is beginning to put its united shoulders to the wheel to remove this handicap, aided and abetted by the seasoned operators of power wagons, who now appreciate the true importance of intelligently driving and caring for motor trucks.

The cause of the driver's problem is generally to be found in ignorance—ignorance both on his part and the truck owner's. And the psychology of this ignorance on the driver's part is thus graphically put by Mr. David Beecroft, a leading authority: "Many of them have rarely, if ever, ridden on a vehicle with rubber tires. If they have been horse drivers, they have grown accustomed to steel tires and slow speeds. When they become motor-truck drivers they find rubber tires and moderately high speeds thrust upon them. The only natural thing that can be expected of them is abuse. Many of them are not accustomed to speed, and the sensation is pleasing. They imagine that the solid rubber tire is indestructible. In a word, they fail to recognize the enormous strains that are imposed on a tire by a loaded truck traveling at speed."

The psychology of the owner, which is partly the cause of the driver's problem, is thus expressed: "They often do not take that interest in a truck which they are expected to. In many cases they are too busy with the executive work of their business. They leave the driver and the truck alone, the same as they were accustomed to do in the days of the horse. They fail to recognize that a much greater investment is placed in the hands of the driver, and that it must more closely approximate its utmost capacity in operation in order to produce the necessary results. The driver can largely make or break a truck so far as its good name in performance is concerned. But the driver is human, and instead of being made master of his own situation so far as the truck is concerned, he should come under the direct supervision of the owner or his executive staff. Under such supervision he will be strengthened, educated in the work of caring for his machine, and become a better investment to his employer."

The truck manufacturers have tackled the educa-

overspeeding, and undercare of trucks works a great injury by placing a load on their shoulders which they are able to bear only because many trucks are so well made that they can in an average of cases



Loading a contractor's truck by means of a chute at the rate of one thousand pounds a minute

more than make good in spite of the handicap they are operating under.

Knowing that in the majority of firms the shipping clerk is the "be-all" and "end-all" of the delivery system, and that it is he who must be reached in order to correct these abuses, some manufacturers have started tactfully to cultivate and educate these czars of the shipping section, by having their experts go from place to place calling meetings at which the traffic man and shipping clerk are addressed on these evils. And this education of the man responsible for these abuses is bearing fruit, too. One manufacturer writes: "Among our customers who have fleets of trucks it is the custom to safeguard against overloading by seeing to it that this does not occur when the trucks leave their warehouses. This they do by weighing the load as carefully as if it were being shipped by a railroad at a freight or express rate of charge. Since starting this practice some customers say they have saved from \$2,000 to \$5,000 per year in tire economy alone, and in addition have been given valuable information on the amount and cost of their transportation."

It suffices to say that no other mechanical industry has taken the paternal interest that the motor-truck industry has in its product long after the title to it has passed; nor has spent or is continuing to spend the greater part of its profit in the "missionary period of the power wagon" in educating driver and owner; nor has it given him more costly service in labor and materials that he may get the best out of the new freighter. Says a big, broad-gauged head of a great Pittsburgh firm using a big fleet of power wagons: "For a number of years the trouble has not been with the manufacturer of the truck, but with the firms using it. Most business houses are unwilling to give the time and attention that this piece of machinery, like all others, requires. They [trucks] are with us to work uninterruptedly twenty-four hours a day, provided they can have the proper care."

A Device for Recording Daily History of Trucks

SECOND, perhaps, to the river problem, the worst deterrent to the development of motor transportation (save the "horse habit") is the adverse legislation that is being agitated and actually passed by several States against it. These measures are either of the nature of class legislation, in that they propose a tax on motor trucks and not on horse-drawn vehicles, or they forbid power wagons of a definite weight limit (14,000 pounds and 25,000 pounds combined weight of truck and load in Pennsylvania and Massachusetts, respectively) from using public highways; another feature of this absurd legislation forbids a load of over 15,000 pounds on any one axle of a power wagon, the reason for the special tax also being given that "motor trucks damage and destroy highways." The ignorance and demagoguery actuating these laws demand the attention of all thinking people. No motor trucks—even if it were practicable to build them in twenty-ton units—can damage even the crude existing highways. The largest units in any common use (five tonners) generally have twelve linear inches of rubber-tire surface on each rear wheel. These big tires, by "rolling out the road" smooth and hard, accomplish for the State and municipality the selfsame thing it pays contractors big sums to do with road rollers. The resiliency of its rubber tires also causes absorption of the blows to road surface that are incident to steel-shod wheels, which not only strike a hammer blow, but, by having a narrow surface for a given

load as against the wide load-carrying surface of motor-truck tires, cut deeply and leave ruts that in time mean expensive repairs.

Modern business owes much to the power wagon for having taught and emphasized to it the value of time in its merchandise-delivery practice. No honest truck salesman denies that the machine costs more money per hour to operate than the horse, but he proves that the extra cost is repaid many times over by the increased earning power of trucks. Operators of power vehicles realize also that the idle time of trucks is much more expensive than the idle time of horse wagons. The motor truck can, and to be profitable should, be actually on the move at least eight hours per day, and in some businesses ten hours per day—and perhaps this amount of time in all businesses. The personal equation—the driver—is admittedly the only barrier that science has not fully removed as a retarder to power-wagon progress. It has partly solved this final objection of the business public against the new freighter by producing in the past year or so silent mechanical detectives, which, by graphically recording every minute of the truck's daily history, enable its owner to keep his trucks at work and to make their use profitable. The detailed history of the truck's actions each day, as registered by these "truck time recorders," enables the owner to tell just what the driver has done, how much time has been spent in loading, how much in stops on the road, how much for meals, etc. If this idle time is excessive, the owner can take prompt steps to correct the abuse.

Building Trucks to Fit the Business

HARDLY three years back, when the merchant bought a power-driven truck, he demanded of the manufacturer "the standard type of body for his business," and the manufacturer (if he built bodies) copied that standard type; this practice of fitting a general type, size, form, etc., of body was an inheritance from the horse-wagon builder, who often arbitrarily designed bodies for different businesses more from habit and custom than any application of scientific principles. To-day the body-building art for power wagons is a near-science, and the body-building companies all over the land specializing in power trucks are the beneficent agents that have made the power wagon practicable and profitable in scores of businesses it was debarred from in the recent past. These "truck tailors" say: "Mr. Business Man, we will cut and fashion you a body to fit your business; you don't have to change your business so as to fit your truck." And they do, and with such cleverness and ingenuity that the load fits the body as it should without waste of an inch of space when properly loaded with the commodity it is designed to carry; and the shape or form is such that the material can be put on and off with dispatch.

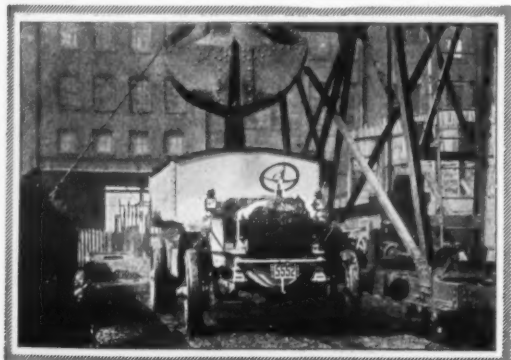


The use of the truck in wire-emergency work is an old story. But the truck is growing far more efficient

A user of a large unit power wagon now insists on a body shaped and built to his individual requirements; not only designed with proper distribution of weight, but proper capacity for the bulk value of the goods to be hauled, for the service relation for which the body is designed determines the success or failure of the whole motor truck. Specialization instead of standardization in body design is vitally essential in getting all the possible work units out of a power wagon, because no two users even in the same business will use their autotrucks in exactly the same way. "Tailored-to-order" bodies also prevent the overloading as well as the underloading evils of the standard body. The size of the standard body is gauged by the volume of a given weight of one sort of material. For example, five tons of coal will take up approximately six cubic yards of space. If the body is built with a capacity of this amount and then



The amount of material deposited in any one spot by this asphalt truck is under perfect control of the driver



Another method of loading that almost makes one believe machines will some day do all our work

tion of the driver first, as upon him depends very largely the efficiency of the truck. Manufacturers building for future business are glad to go out of their way to help their customers obtain the best possible drivers. Many of them have established schools, where the candidate is taught the "how and why" of the mechanism, the operation and the care of the vehicle he is to operate. If they do not maintain schools, they are willing to take the horse driver into their service stations, and put him through a short, practical course in truck mechanics. After giving him all of the knowledge of the inside of the truck necessary to make him fit to handle it from the outside, a demonstrating truck is placed in his hands, and with an expert driver at his side he is given road lessons. Men who cannot afford to leave another occupation by day while receiving this education have the privilege of attending evening schools, which are also conducted by some of the representative truck manufacturers.

The truck manufacturers have also begun the education of the owner, as the régime of overloading,



Opening Toggle-Lock



Removing Inner Band

A Marked Advance in Rim-Construction That Will Reduce Tire-Troubles to a New Minimum

YOU can take the tire off this rim without separating the side-flanges from the casing. You can easily remove the inner tube without disturbing the side-flanges.

Think what that means! You'll never have to waste time and labor separating a side-flange and casing that have "frozen" together.

And the side-flanges that grip and hold the tire to the rim are endless—no rough ends to chafe, rub or cut the tire. That means lessening your tire-expense, and reducing your tire-troubles.



Inner Band Removed—Side-Flanges Remaining on Tire

To get at the damaged tire after you've slipped the rim off the felloe-band, all you have to do is lift the toggle-lock with a screw-driver, and pull out the inner band.

Opening the toggle-lock collapses the inner band so it is smaller than the side-flanges. It slips out easily.

Fastening the toggle-lock is just as easy. A pressure of the foot does it. And the toggle-lock secures the inner band so firmly that the ends can't move, and dirt can't enter. In fact, it makes the inner band practically endless.

Why the Number Sixty Saves Time, Trouble and Tires

Practically every worth-while automobile made in this country is equipped with demountable rims. They are an asset to any car.

The success of any demountable rim lies in the quick and easy relief which it affords from tire-trouble; the safety which it contributes; its lightness in weight.

But merely to replace a damaged tire with one already inflated on a rim is not permanent relief from the discouraging effects of tire-trouble. The tire must be removed from the rim and replaced or repaired. Therein is the stumbling-block.

Leave any tire on a rim for a considerable time, and the tire is bound to "freeze" to the sides of the rim.

To separate the "frozen" parts is the greatest difficulty of tire-changing.

Heretofore there has been no rim that permitted tire-repairs without first separating the tire from the sides of the rim. In fact, it was thought impossible to design such a rim.

But we have produced it. Judge for yourself the Number Sixty Stanweld Collapsible Demountable Rim.

It combines the best features of those rims that have won for us our great success.

It eliminates the objectionable points—the things that damage tires; the things that cause delays; the things that cause accidents; the things that reduce the efficiency of other parts of the motor-car; the things that make tire-changing a difficult, strenuous job, instead of a mere repair-job.

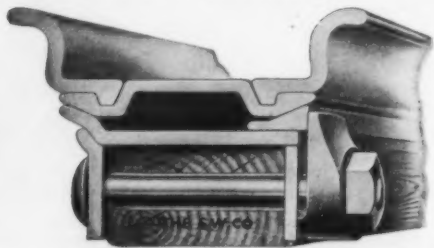
Moreover, it's a light rim. With all its strength and mechanical perfection, the Number Sixty is not much heavier than a plain clincher rim.

Surely the high quality and efficiency of the Number Sixty—the time it will save you, when time is worth most; the labor it will save you, when you feel least able to struggle with a tire-changing job; the money it will save you by lessening wear on your tires; and the comfort and safety that it assures—should make you want this new rim.

And you can have the Number Sixty applied to the car you now own, at a very low cost.

You should get it on your new car at no additional cost.

Write for interesting booklet.

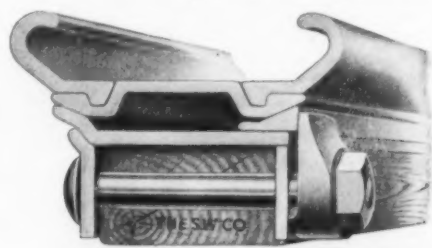


Cross-Section of Straight-Side Type

The Standard Welding Company

Pioneers and World's Largest Producers of Rims for Motor-Driven Vehicles

Edgewater Park
Cleveland



Cross-Section of Clincher Type

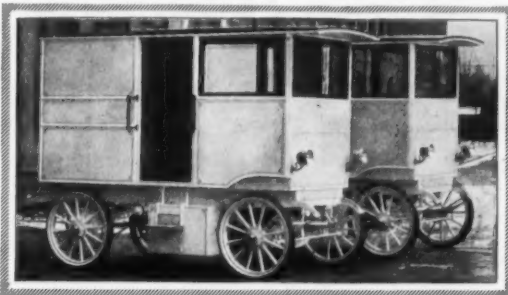
sold to a contractor who hauls sand (practically twice as dense as coal), the truck is certain to be overloaded. Conversely, if the contractor uses the same body for carrying hair for plastering, he cannot carry a sufficiently paying load to make the truck yield the proper return. Limitations of truck chassis—length, width, and practicable height—impose restrictions, but truck manufacturers are offering more and more variety of designs. Thus it would be impossible to carry a load of empty barrels on an ordinary two-ton chassis, the wheel base being too short and the body overhanging too much. But one of the two to four wheel bases the manufacturer offers is a "two-ton chassis for empty boxes," which is much longer than a six-ton chassis for sand or building material.

The Advantage of Nest Bodies

THE versatility of the power-wagon body builder is expressed in nest bodies, which are loaded while the truck is away on a trip, and later wheeled or rolled into the vehicle, or the truck backed directly under the body, which may be dropped into position by an electric crane or derrick without effort on the part of the loading crew; demountable bodies, by means of which many different materials with different bodies (the demounting and remounting performed by the truck's motor, operated by the driver at his seat) may be handled on the same chassis—one body for coal, another for bricks, a third for barrels, a fourth for furniture, etc.; package-delivery bodies with upper and lower shelves suspended so that the shelf may be raised or lowered to facilitate reaching packages from the seat; compartment bodies, which enable different materials—coal, cement, coke, lime—to be carried separately at the same time and each sectional unit unloaded independently of the rest; combination bodies, either or both of the two units comprising them being fixed or removable. In either case they resemble decks of a ship. One type for general merchants' or contractors' service consists of a solidly inclosed permanent lower body, fixed or dumping type, with a removable rack top fitting into sockets at the sides. A tarpaulin may be spread over this rack to protect the delicate, bulky materials carried on the upper body. Bodies for bottled goods or small merchandise are built, in addition to two decks, into three sections divided by transverse bulkheads, making six compartments, permitting sorting into brands, grades, etc., and preventing cases in a half-empty truck from shaking about in the body. One ingenious manufacturer offers a five-purpose convertible body which, by different arrangements of its parts

fitted together by means of stakes and sockets, gives the utilities of a plain platform, a plain box body, an open express body, an open rack body, and a covered express body.

Planning a successful motor-truck delivery system is like planning a railroad. As in the operation of the railway the business and office side is of greater importance, so in the use, maintenance, and control of a motor truck the business organization and systems are of vastly greater importance than merely the



These electric trucks for milk delivery are equipped with refrigerator compartments and are clean and noiseless

construction of the machine, which may be more or less taken for granted on a reputable maker's guarantee. When the user begins to think in terms of motor trucks instead of horses as delivery units, then he must begin to study time-saving devices to eliminate lost motion. Great and far-reaching in their effects are the lessons being taught by the "mechanical horse" in the value of motion study—internal efficiency in the handling of goods to match its own wonderful external efficiency.

Shipping-room congestion incident to horse-delivery transportation, and caused by slow handling or a combination of manual handlings of goods, doing the work while the horse rests, or due to too small shipping departments, is beginning to be treated with the revolutionary serum composite of planning the work—the routing, the schedules, plotting the peak loads and low points in the transportation curve and leveling off the high spots—all to the end that the truck may be kept working, working every possible minute of the day. The commandment for the motor is: Thou shalt not rest.

Department stores and business houses that have

learned the voracious appetite of the autotruck for "eating up work" are introducing traveling belts on every floor and through every department. These goods conveyors are in widths proportional to the amount of business done in the department. They convey all packages to the gravity chutes, where they are properly distributed, there being separate chutes for packages that go by freight, others for packages that go by express, etc. Useless motion and waste time are eliminated by keeping drivers out of the shipping department, confining their work to taking packages out of certain bins and placing them on their own motor wagons. Freight elevators that bring the packages from the basement distributing room, by being made to rise to the level of the truck platform, free the driver from the necessity of lifting these packages into the machine, conserving the energy of the delivery force, conserving time in loading and unloading, and keeping the truck in motion and earning money.

Efficiency Is the Word

HORSE methods must become obsolete with the horse.

"Business doctoring," that the railways have had to apply, is being forced even upon big business by the (sometimes) tenfold advantage in efficiency of the motor over the horse. By the simple expedient of putting a power winch (driven from the engine of the truck) on one of its five-ton units, a wholesale dry-goods house in Chicago, shipping heavy boxes and bales, makes the truck load itself, saving thereby the time of three men, valued at \$3 per day, or an economy of \$900 per year of 300 working days; adding also an extra trip per day for the truck, valued at \$1,200 for the year—a profit of \$2,100 on a mere auxiliary costing \$350, entirely separate from its estimated earning of \$25 per day for the truck itself.

In 1913 our 25,000,000 horses and mules consumed food to the value of \$2,000,000,000, or as much as the total operating cost of all the 250,000 odd miles of railways in the United States. Figuring conservatively that one motor can replace on an average four animals, we need 3,250,000 motor trucks in the United States now to replace 18,000,000 of these horses. Estimating the cost of these 3,250,000 trucks at an average of \$2,000 each to be \$6,500,000,000, we can in a trifle over three years pay for these trucks with our "horse cost-of-living" bill without being one dollar out of purse. Exit horse. Enter truck and tractor! And let every man jack of us join in the chorus.

The Electric's Progress

MOST of us are perhaps unfamiliar with the several steps of development covering a period of more than one hundred years, yet many have a vivid recollection of the family equipage of our youth.

Looking backward, we find old Dobbin and the family chaise enveloped in a mist of sentiment. When the soft tree-lined roads were turned into vitrified pavement it was better for old Dobbin and better for the community that a more efficient mode of transportation be found; and when Dobbin was led off into the wings, leaving behind him the modern

By Frank W. Smith

nearly all of our large cities; their general use, as a matter of necessity, promoting an adequate means for their care and maintenance.

The Commercial Vehicle—Early History

THE influence of the successfully operated passenger vehicle has largely resulted in the adaptation of the electric for commercial employment. The demonstration of their simplicity and low cost of upkeep in the home has been taken advantage of by keen business men for their more serious problems of business delivery and other service.

The commercial vehicle was, however, unfortunately destined for a very serious check in the normal extension of its use in the form of selling agents who, without any financial interest in or obligation to protect the source of production, made contracts to sell factory outputs, and being chiefly interested in the margin of profit at which the machines could be sold proceeded to unload them on the unsuspecting purchaser by representations as to their life and performance which could not be met by the equipment disposed of.

Many instances in the early history of the commercial vehicle may be pointed to where the electric vehicle was misapplied to meet conditions which it was never designed to face.

It was also difficult to make definite comparison between horse haulage and motor haulage. Inexact accounting and other difficulties presented themselves. To some extent the feeling of sentiment which had rightfully attached itself to the horse as the servant of man had to be reckoned with, and it was not until it was generally realized that liberating the horse from the grueling labor of city transportation was a genuine kindness that this sentiment changed to the point where business men were prepared to consider the two methods of haulage on the basis of efficiency only.

Because of these and many other obstacles to the adoption of motor trucks, it is interesting to take a

rapid survey of the early history of the electric commercial vehicle.

Commercial vehicles propelled by electric current came into existence in 1897. The early models of course possessed their disadvantages, but the same improvement in design and accessory equipment which goes to make up the present-day commercial vehicle has been apparent with this type of machine, as already indicated with regard to the passenger or pleasure equipment.

The first electric commercial vehicles produced show a reliability after years of operation that proves



The electric truck has its place in the new Japan. A load of charcoal and the nifty conductor thereof in the streets of Tokyo

vehicle—fully equipped to meet every emergency of metropolitan existence—it was evident that the electric was the logical vehicle for city and suburban use.

The electric vehicles for passenger and pleasure service have had a very extensive and continued use and they are to-day employed in great numbers wherever their service as a convenience or pleasure has been enhanced by their reliability and ease of operation. As a general utility in the home or for city service to the professional and business man, they have been used successfully in great numbers in



A San Francisco infant out for an airing. The electric is among the most docile of the horseless vehicles

their worth. In fact, it may be said that the endurance of vehicles well maintained and systematically cared for is not yet known. Several of the service wagons operated by the New York Edison Company have been in use for ten years; the United Electric Light and Power Company of New York City claim the same experience; Frederick Loeser & Co. of Brooklyn are still operating a wagon that has seen eleven years' service; Stern Brothers of New York City have had one for nine years; three of the Tiffany fleet were delivered to that firm early in 1901; Arnold, Constable & Co. are using three of their



Some Plain Truths About Tires

THE Firestone Economy of Most Miles per Dollar is a direct result of the Firestone method of building—from design to final test.

The Firestone design prevents all abnormal strain—the quality and quantity of Firestone rubber will stand furious heat and terrific wear.

The wrapped tread construction, the two-cure process, the open steam vulcanizing—are all principles vital to Firestone supremacy—Firestone economy.

Economy of upkeep follows naturally the resilience of the Firestone rubber which, by absorbing little shocks and vibration, means long life to the car.

An inspection of the cross-sections of a Firestone Tire shows that greater tread-toughness and greater tread-thickness are more than Firestone claims—they are fundamental Firestone facts—the vital reasons back of Firestone Service—Most Miles per Dollar.

**Most
Miles
Per
Dollar**

Your Dealer Will Tell You

That the name "Firestone" stands for tire quality. He will tell you that the ends of security, comfort and economy are served by the use of Non-Skid Tires. The Firestone Non-Skid tread gives longest wear, greater resiliency, added protection against the shocks of bad going.

It presents to the surface of the road numerous edges, angles and hollows that grip the highway and prevent the skidding which was so great a terror to motorists before the days of the Non-Skid.

In thus affording security against tire accidents and insuring longer wear, Firestone Non-Skid Tires are doubly economical. They perform service for

the car owner's pocketbook and for his peace of mind.

The high grade of new rubber used in the manufacture of all Firestone Non-Skid Tires prevents the sharp safety edges and angles from chipping—and even after these have worn down, a sturdy tire remains.

For longer wear, increased resiliency, greater security, tire and gasoline economy, tire-heat radiation, the Firestone Non-Skid is ideal, whether in Winter, Spring, Summer or Autumn. For all climates—for rear and front wheels—it is the year-round, complete service tire—with a proved value greatly in excess of its slightly higher cost.

The Firestone Tire and Rubber Co., Akron, Ohio—All Large Cities
"America's Largest Exclusive Tire and Rim Makers"

Pneumatic Tires, Truck Tires, Pleasure Electric Tires, Carriage Tires, Fire Apparatus Tires, Rims, Tire Accessories, Etc.



Firestone

NON SKID TIRES

machines originally put into service in 1903, and a delivery wagon included in the fleet of a New York dry-goods store has been in regular service since 1888. There are several 1890 models still running in a number of different activities. The original truck of another concern, delivered in this year, is making its regular trips through the streets of New York, while a Philadelphia firm has been delivering with its first truck for eleven years past. Many other examples of long service could be given.

During the period 1900-10 the electric commercial vehicle went through a decidedly satisfactory period of experimentation and test. The number in use has increased annually; repurchases were made by concerns of large haulage requirements, and more and more manufacturers entered the field and placed machines on the market.

The Electric of To-Day

TO-DAY the electric vehicle is the most scientifically designed machine employed in the transportation of city merchandise, and this is largely due to the fact that the data on which its design is based were fully developed in another, older, and well-established line of business (the electric railway) before the original project of producing electric vehicles was first taken up seriously.

Experience has shown that most inventions by the very limitation of their excellence have a particular field. What has been the case in so many instances of human ingenuity for the promotion of comfort and convenience is equally true of the electric vehicle. Its sponsors have always recognized that there were certain sorts of service best performed by other modes of transportation, but just so surely the intrinsic merits of the electric vehicle have made it the ideal vehicle for city and suburban use, and to-day it is necessary only to repeat a few points in the indictment against the "costly and inefficient hay-fed motor" to interest the merchant in the economical and efficient electric truck.

Edison has said that a horse is the poorest motor ever built. He eats ten pounds of feed for every hour he works, and he eats 10,000 pounds of feed a year, and yet his thermal efficiency is only 2 per cent.

The price of the horse has increased 143 per cent in the past ten years; the price of his feed, harness, barn, etc., have kept pace. The horse to-day is not one pound stronger than he was thirty years ago; he requires 750 cubic feet of barn—he and his feed will occupy at least 3,000 cubic feet.

The average life of a horse is also important, it being estimated with the pulling of heavy loads over city streets at only four years. However, \$500,000 worth of horses died or were destroyed during a single week in 1911 in New York City during a protracted hot spell, and it is reported that Chicago loses over \$100,000 worth of horses each year.

It may well be asked why, with such evidence demonstrating constant well-ordered development, an unlimited scope for application in city and local suburban service, and extensive employment by the most conservative types of business organizations, the electric commercial vehicle has not attained an almost universal employment within its legitimate province of domestic-utility and city-merchandise transportation.

Fundamentally, the anticipated adaptation of the electric machine within its well-recognized sphere is as certain of development as any of the other great industrial devices employed to perform work by means of electric current. The machine being fundamentally based on principles of design proved sage in other commercial applications and capable of adoption in such variety of service as may be expected in its field of utility, the question appearing above may be regarded as a transitory one, which time will answer affirmatively by demonstration of the machine's supremacy.

Good Roads

THAT good roads are an important factor in the future development of the electric vehicle is now well recognized by those interested in this important industry. Where good roads and the proper maintenance of same exist, there will be found the most pronounced development in the use and adoption of the electric vehicle. That hills have no terrors for the modern electric is now well understood, especially where good roads exist. Nor is the electric necessarily confined for satisfactory performance to a per-

fect roadbed, but the broad adoption of the motor vehicle demands good roads.

A very recent round-trip run was made in an electric pleasure vehicle from Washington to Baltimore on a single charge of the battery. During a part of this trip the road had been heavily oiled, and this condition materially checked the performance of the vehicle, and at one point it is reported that heavy sand was encountered. The machine, however, had no difficulty in making its way through this obstruction.

Washington-Baltimore on a Single Charge

FROM Washington to the downtown district of Baltimore the trip was made in four hours.

The run through Baltimore was over rough cobblestones. On the return trip to Washington five hours were consumed, it being necessary to make a detour because of road repairs which were under way.

It is reported that the car arrived in excellent condition, with enough current remaining in the batteries to run a few miles further.

This car, which is of standard design and make, had already been driven upward of six thousand

increased field of operation for power vehicles, but the actual work when it is undertaken will open a greater opportunity for the use of motor trucks in road service. The plan outlined in the Government measure is an excellent one and calls for an appropriation of \$500,000 to be spent in improving roads selected by the Government. . . .

The Third American Road Congress, which occurred in Detroit, September 29 to October 4, 1913, had one session devoted entirely to the discussion of the features of highway engineering. At this session were gathered together most of the highway commissioners of the States actively engaged in road building.

The Automobile Chamber of Commerce is agitating this subject, and makes the prediction that unless more durable roads are built than the water-bound macadam and bituminous macadam, the burden of cost of maintenance will become insupportable in a few years. At a meeting of the Executive Committee of the Chamber, recently held, a resolution of the Good Roads Committee approved the Lincoln highway project in the following terms: "That the Automobile Chamber of Commerce approve the plan and object of the Lincoln Highway Association, and render the association such assistance from time to time as may be properly feasible."

The Electric Vehicle Association of America, through a committee, is giving attention to this important question on behalf of the electric-vehicle industry.

Much has been written on this subject, and more is to follow, as will appear from announcements put forth by publications interested in this subject.

Comparative Cost Data

AS PREVIOUSLY stated, the operation of horse-drawn vehicles has heretofore been the standard method of transportation. Electric commercial vehicles are to-day displacing the horse in more than one hundred lines of business. The changes have not been without deliberate study. Many of the larger installations of to-day are those which were started ten to twelve years ago, experimentally, with one or two vehicles, and have gradually expanded into fleets, which in many cases exceed one hundred in number.

This steady and conservative adoption by the largest and most skillfully managed companies in practically every industry is sufficient argument for the general introduction of machine operation.

There are two methods of arriving at definite conclusions concerning the advantages of motor over horse drawn vehicles. The first is to try them out side by side, keeping actual records and analyzing the records. This involves the expenditure of much time, and in many cases is unnecessary where reliable data of operations under similar conditions are available. This latter method involves the necessity of having at hand reports of tests and records of operation covering periods of considerable length of time. There is, unfortunately, a lack of information on the cost of animal transportation. But few individuals or corporations using this means of haulage have accurate data.

It is difficult to show the extent of the gain with the machine-operated vehicle over the horse unless figures on the latter are at hand. In most cases they are not, so that correct and authentic recommendations are often unfairly discounted to the mutual disadvantage of those concerned.

Most of the electric-vehicle manufacturers are prepared through their experts to make studies of transportation problems in any individual case, submitting to the prospective purchaser reports covering the details of the proposed electric-vehicle service which will be comprehensive and accurate.

"How Much?"

THE ANSWER the oft-repeated question "How much will it cost to run?" could well involve the space of several lengthy articles. A general answer is possible, however, by giving either typical cases or average data.

Each transportation department has features which are peculiar to it and to the city in which it is located. These variables naturally make the total costs higher or lower than the average, so that a given set of figures should not be taken to apply directly without correction to the individual case under consideration.

The Research Division of the Electrical Engineering Department of the Massachusetts Institute of Technology has recently placed before the public reliable data as between the horse and electric haul-



Lower Broadway, New York, in the early eighties, with a pervasive horse traffic and a jungle of overhead wires, resembles a nightmare compared to the horseless, wireless street of to-day

miles with the same equipment. To this subject of good roads much attention is now being given by public officials, societies interested in electric-vehicle promotion, etc., and a very general sentiment has been aroused throughout the country as to the condition of our roads.

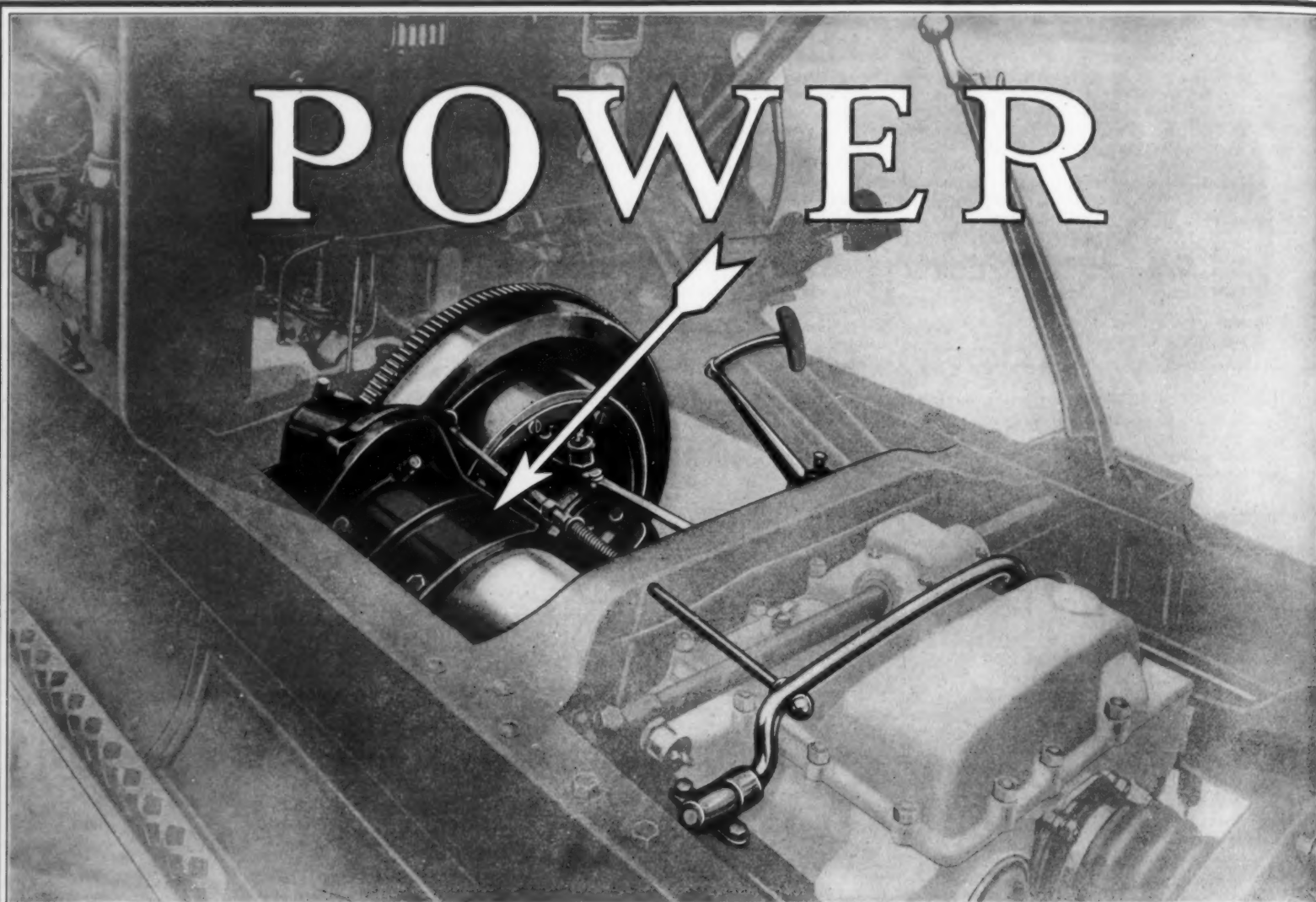
The Way to Improvement

IT IS conceded that Europe is, generally speaking, in advance of the United States with respect to road improvement.

Statistics have been produced which show that, although the average expenditure on the improvement of roads in this country exceeds \$1,000,000 a day, a large portion of the money is improperly spent or wasted because of the failure to build the right type of road to meet the local requirements, or failure to provide for the proper maintenance of same. We have much to learn with respect to proper road construction from other countries. However, of late there has been a widespread interest evidenced in road improvement, and there is a strong movement toward better and improved conditions. Scientific maintenance will be one of the chief features of this work.

In some quarters the belief prevails that to determine the best class of road to meet traffic conditions, and what class of traffic is most harmful to roads, it will be necessary to lay experimental paving where the traffic would supply differing conditions and to closely observe these results; these observations to be made jointly by vehicle manufacturers and contractors experienced in the art of road construction.

On this question of better roads the National Government has given the vehicle industry considerable assistance. Mr. John M. Willys, president of an important truck manufacturing industry, says (referring to the Post Office Appropriation Bill passed by Congress last September): "Not only does the primary idea of the bill—the improvement of roads throughout the country through Federal aid—mean a vastly in-



A compact device with tireless power—
that is the Gray & Davis Starting Motor.

By power we mean

— power to crank even the largest 6-cylinder engine,

— power that is as certain in zero weather as in summer,

— power to spin any engine fast enough to fire instantly on magneto,

— power to overcome back-firing and pre-ignition,

— power smoothly applied, doing its work silently and evenly.

There is in the whole Gray & Davis Starting-Lighting System no evident effort, no mechanical

indecision—only that stubbornly certain work which comes alone from **Power**.

This is the natural result of correct design and years of experience in constructing electrical automobile equipment.

When you select the Gray & Davis Starting-Lighting System, your judgment is approved by the manufacturers of leading automobiles in every price-class who install our system in their cars.

Our new catalog should be in the hands of every motorist. Tells fully about starting-lighting systems and will help you materially in judging the latest automobiles.

Visitors to the New York and Chicago Automobile Shows should be sure to see the special Gray & Davis Exhibits.

GRAY & DAVIS, Inc., Boston, Mass.



GRAY & DAVIS



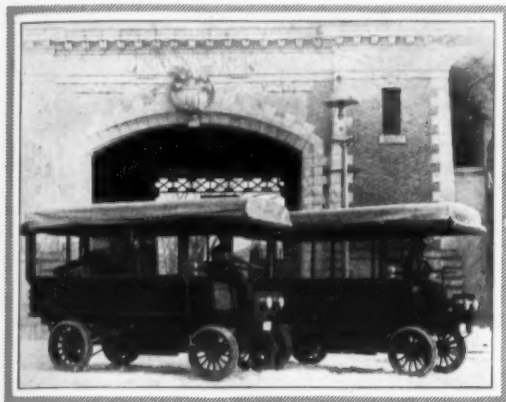
STARTING-LIGHTING SYSTEM



age costs, following a very careful investigation of actual installations and equipment. This information has been collected by means of record form. The tables herewith are reproduced from this study as being indicative of average performances.

Space will permit the submission only of cost data on a 1,000-pound vehicle and a 3½-ton vehicle. The same general information has been tabulated by the institute for other ratings, and this information is available to those interested.

These estimates, based on actual operating data, supplemented by itemized costs furnished by many operators, give a broad outline of average conditions. The items of loading and unloading, as well as distance between points of receipt and delivery, agree closely with those obtaining in large metropolitan



Two of the Government's many electric trucks. These particular ones are in the service of the Navy Department

districts. Inspection of these tables shows in each case the economy of the electric vehicle over horse-drawn equipment. From this it will be seen that the number of miles covered and deliveries made by electric trucks are sufficiently in excess of those negotiated by the horse to justify the change, without reference to the equally important advantages of time, space, advertising, and reliability of service. The statement of economies effected is conservative. The great majority of electric-vehicle applications show savings to be considerably more than these tables indicate.

The column heading "Extra Horses" refers to the average number of horses required to operate the drawn vehicles each working day. This allows for sickness and rest under average conditions, making the basis of comparison fair.

1,000-POUND RATING

ESTIMATE FOR CITY PARCEL DELIVERY

Average maximum load, approximately.....	1,000 lb.	
Miles per trip.....	12	
Deliveries per mile.....	6	
Deliveries per stop.....	2	
Hours per trip for loading.....	1.0	
Minutes per delivery.....	0.9	
Minutes per stop.....	1.8	
Hours working per day.....	9	

	1,000 lb. Electric Vehicle	1,000 lb. 1 Horse Wagon Gasoline Vehicle	(1, 2 Extra Horses)
Average running speed, miles per hour.....	9.5	10	5
Hours per trip, standing.....	2.1	2	2.1
Hours per trip, moving.....	1.2	1.2	2.4
Hours per trip, total... ..	3.3	3.2	4.5
Average number of trips per nine-hour day....	2.7	2.8	2
Miles per day.....	33	34	24
Deliveries per day.....	198	204	144
Days used per year....	285	270	285
Miles per year.....	9,400	9,200	6,800
Deliveries per year....	56,500	55,000	41,000

Expense per year:

Tires or shoeing....	\$150	\$170	\$54
Repairs.....	270	500	125
Battery.....	225		
Veterinary.....			9
Lubricants.....	15	50	
Electricity at 3c. per kilowatt hour.....	145		
Gasoline at 15c. per gallon.....		200	
Feed.....			290
Garage or stable.....	200	200	110
Driver and helper.....	1,000	1,080	1,000
Depreciation.....	165	305	160
Interest.....	60	60	24
Insurance.....	135	170	30

Total annual expense.....	\$2,365	\$2,735	\$1,802
Cost per day.....	\$8.30	\$10.10	\$6.04
Cost per mile.....	.25	.30	.27
Cost per delivery.....	.042	.05	.045

Quoted from

"The Electric Vehicle Handbook, 1913."

Jan. 10

3½-TON RATING

ESTIMATE FOR BEER DELIVERY TO SALOONS

Average maximum load, approximately.....	7,000 lb.	
Miles per trip.....	14	
Calls per mile.....	0.7	
Hours per trip for loading and unloading.....	0.75	
Minutes per call.....	8	
Hours working per day.....	9	

	7,000 lb. Electric Vehicle	7,000 lb. 2 Horse Wagon Gasoline Vehicle	(2 Extra Horses)
Average running speed, miles per hour.....	7	8.5	4
Hours per trip, standing	2.1	2.1	2.1
Hours per trip, moving.	2	1.7	3.5
Hours per trip, total...	4.1	3.8	5.6
Average number of trips per nine-hour day....	2.2	2.4	1.6
Miles per day.....	31	33	22
Calls per day.....	22	23	15
Days used per year....	285	270	285
Vehicle miles per year. 8,850		8,900	6,250
Calls per year.....	6,200	6,230	4,370

Expense per year:

Tires or shoeing....	\$330	\$380	\$144
Repairs.....	300	625	125
Battery.....	360		
Veterinary.....			24
Lubricants.....	15	60	
Electricity at 3c. per kilowatt hour.....	265		
Gasoline at 16c. per gallon.....		350	
Feed.....			760
Garage or stable.....	240	240	280
Driver and helper.....	1,210	1,280	1,210
Depreciation.....	290	610	250
Interest.....	102	120	38
Insurance.....	140	180	35

Total annual expense.....	\$3,252	\$3,845	\$2,866
Cost per day.....	\$11.40	\$14.25	\$10.00
Cost per mile.....	.37	.43	.46
Cost per call.....	.52	.62	.66

Quoted from

"The Electric Vehicle Handbook, 1913."

The Future

ACCORDING to figures obtainable on January 1, 1913, there were registered throughout the several States of the Union up to that time 34,905 electric vehicles.

The passenger or pleasure vehicles numbered 29,268 and the commercial vehicles 5,637.

There were manufactured during 1912 8,756 electric vehicles of both types, which is nearly one-third of the total registration, the increase for the year 1912 over the preceding year being 42 per cent for the passenger or pleasure vehicle and 34 per cent for the commercial vehicle.

An output for the year 1913 of 12,235 passenger and 1,445 commercial vehicles was made by the manufacturers. Fifteen thousand vehicles for the year was predicted by some authorities. As to whether or not these predictions came true will be disclosed when a census is compiled for the year 1913. In New York City alone there were put into service during the first seven months of 1913 271 new electric trucks, bringing the total number of cars in operation in this



The electric industrial truck at docks, piers, railway stations or warehouses has revolutionized the handling of freight

city up to 2,151, or about 40 per cent of all the commercial vehicles in the city. The prediction has been made that this number would be more than doubled by the end of the year.

Prospects of Expansion

OF THE electric in New York, 322 are in the service of brewers; 262 make the department-store deliveries; 197 serve the express companies; 154 deliver bread; 127 are operated by the local electric-lighting companies. Seventy-six different lines of business are represented by these electric trucks.

There are in all some forty manufacturers of electric vehicles in the United States. Throughout the industry there is an optimistic and hopeful view for the future. Manufacturers report satisfactory future delivery orders, and many are the statements which indicate an increase in sales for the last fiscal year of from 30 per cent to 100 per cent.

While large fleets are reported in a number of in-

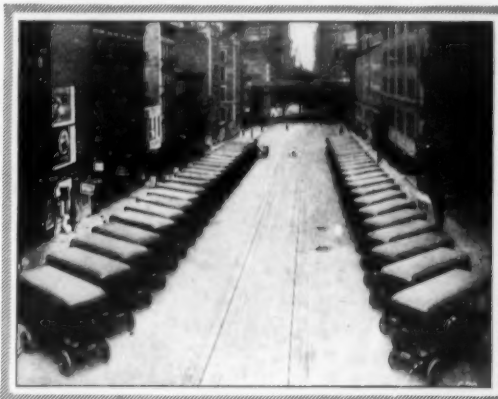
stances, the fact that one to three vehicles from a single firm have been ordered in large numbers shows a satisfactory tendency toward the universal adoption of the electric vehicle.

Repeat orders from prominent firms who have tried out the electric is a most encouraging sign.

Versatility Is Its Middle Name

TO REPORT the various businesses using the electric vehicle would be to list practically every kind of business endeavor in the country. One important maker gives a list of recent orders which shows nearly seventy separate and distinct lines of activity in sixty different cities.

The electric seems to be equally successful in hauling junk and in moving priceless jewelry. It moves



This impressive array forms only a part of the electric-vehicle fleet of one of the express companies

money for banks and express companies, and it hauls dynamite. It pumps out manholes, warps in heavy underground cables, hoists safes and machinery, and moves the sightseer from and to historic shrines. It aids the police in their duties, takes the Fourth of July victim to the hospital, and its activities are continually expanding.

When India has been supplied the electric will follow the sun around the world. It is already used in forty-one of the forty-eight States, and in Canada, Cuba, England, Germany, China, South Africa, Brazil, Siam, Australia, and the Philippine Islands.

While, like the horse, the electric does more work in a given time on level streets, it is successfully employed in cities like Pittsburgh, Cincinnati, Kansas City, San Francisco, and other hilly centers.

The industrial-truck, baggage-truck, freight-truck, and battery-truck crane, etc., are special applications which are finding a wide field. Freight congestion at important centers is now a matter of very serious moment. Cramped quarters, old-fashioned methods, and poor schedules cause confusion which occasions expensive delay, and which, to a large extent, the electric-utility machines are removing.

Dawn of a Great Future

THE Government applies the electric vehicle in many branches of its important work.

The consistent downward trend of electricity rates is an important factor in this electric-vehicle development.

Ten years ago the price of energy for charging averaged about 23 cents per kilowatt hour throughout the United States, compared with from 5 to 3 cents to-day. Electric energy tends to fall still lower in price, particularly for "off-peak" loads. The electric vehicle falls within this class.

The central stations or electric-lighting companies throughout the country are giving this character of business very careful attention.

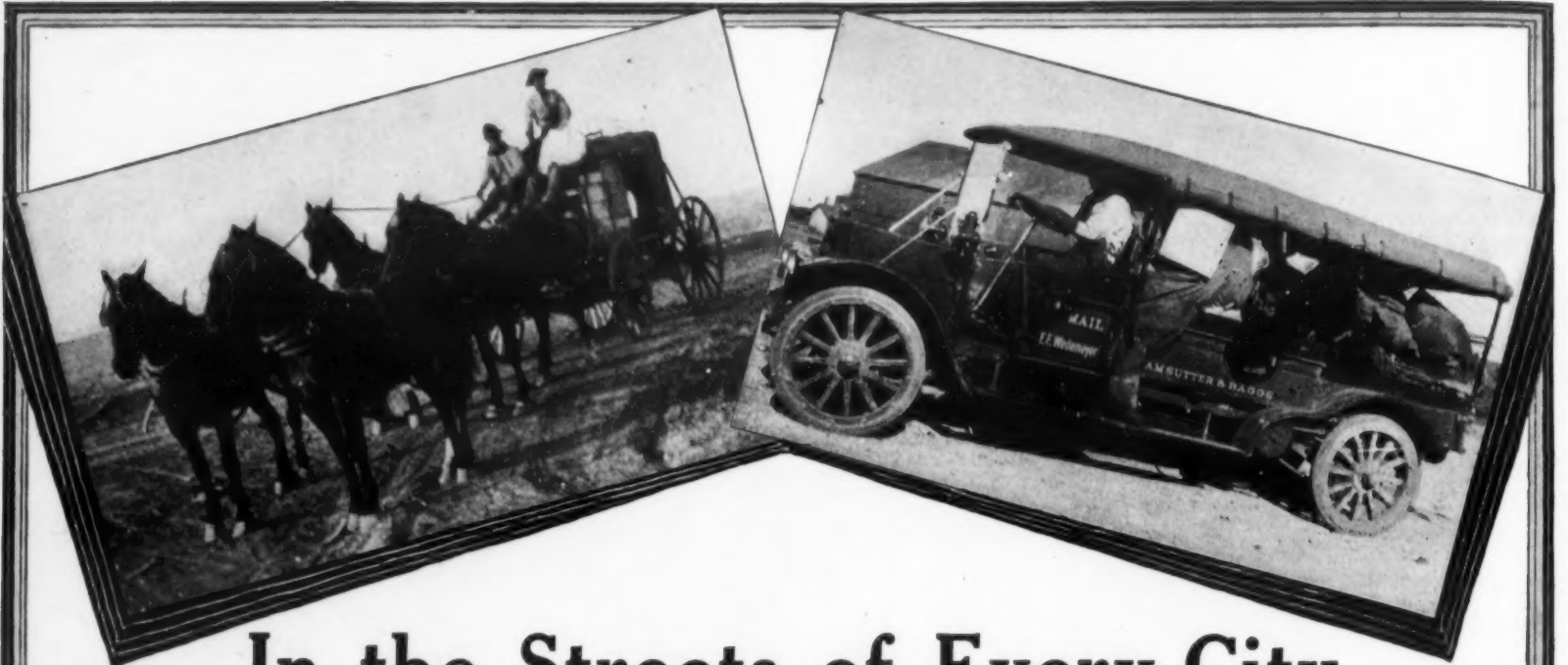
The average costs of all electric commercial vehicles preceding 1911 was \$3,369.72; in 1911 the average was \$2,465.18, and the trend is in a downward direction.

That there is a market for a popular-priced electric in the passenger and perhaps as well in the commercial field is a matter that some of the manufacturers are giving attention.

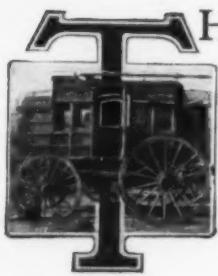
When one considers the family incomes throughout the United States this would seem to be so, particularly in the passenger field. According to statistics the family incomes are distributed as follows:

7,000 families over	\$60,000
40,000	\$15,000 to 60,000
253,000	6,000 " 15,000
700,000	3,000 " 6,000
1,500,000	1,800 " 3,000
2,138,000	1,200 " 1,800

It is evident that to-day the electric vehicle stands on the commercial horizon as a potential factor in city and suburban haulage, which represents fully 80 per cent of the trackless hauling done throughout the country, and when we consider its singular adaptability to this sort of service, it is reasonable to assume that to-day's great expectations may become the actualities of to-morrow.



In the Streets of Every City On the Rim of Civilization— Always the Federal



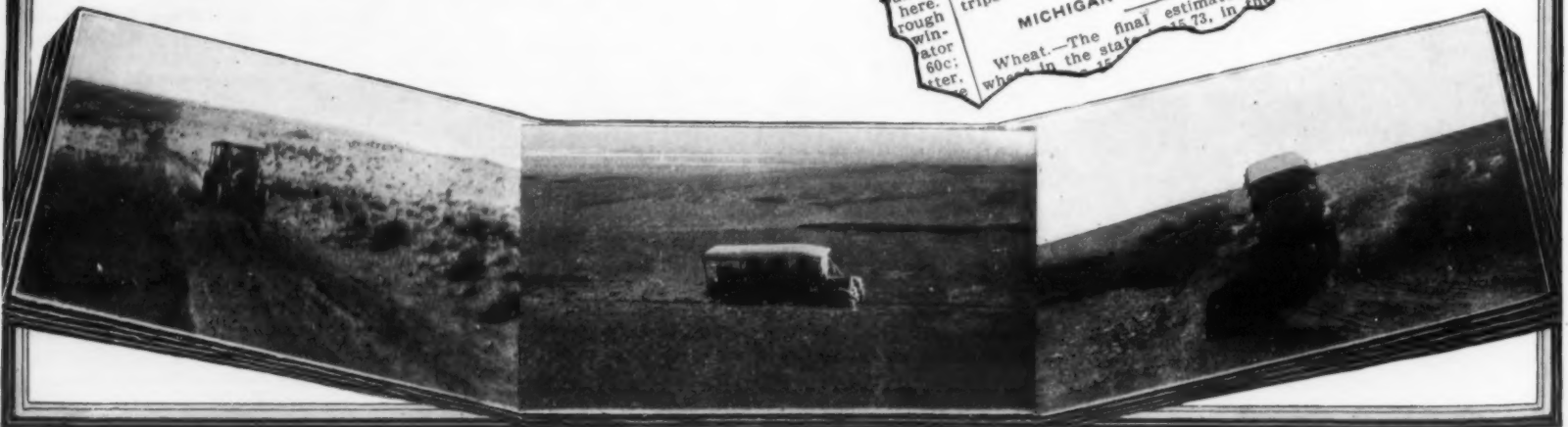
HIS newspaper clipping tells its own picturesque story of Federalized Transportation. For on asphalt pavement, on country road, on precipitous mountain trail, in the sands of the desert, the supremacy of the Federal Truck is universally recognized.

FEDERAL

\$1800

F. O. B. Detroit

Federal Motor Truck Co.
Detroit, Michigan



Mulcting the Motorist

By Dana Gatlin

ILLUSTRATED BY ERNEST FUHR

A young man who was rambling along, reading a paper, actually walked into the side of the machine



I WAS riding in a friend's car one day when he got into a pickle—a barrel of pickles—a whole wagon load of pickles. The barrel was on the back of the wagon; my friend's car gave it a gentle bump; it rolled off and broke and pickles were scattered all around the road. The driver began to swear and a curious crowd quickly collected. There was a five minutes' row. Then suddenly the driver ceased to swear. The gleam of a sudden thought lighted his eye. He leaped from his high seat to the road and, sinking to a sitting posture on the curb, clutched first his leg, then his side, then his head—clearly finding it difficult to decide offhand which part of him was going to be "injured." The crowd howled. So did the policeman who had come up. The whole thing broke up as a joke on the pickle-wagon driver—that is, it seemed to.

"Of course," said the owner of the car, "I'll pay for the barrel of pickles."

A week later I saw him. He showed me a letter which he had received from a lawyer. It threatened a suit for damages in behalf of the "injured" driver.

He ignored the letter; two more followed; then suit was filed. When the case came to trial there were witnesses for the claimant, but none (excepting those who had been in his machine) for the car owner. The whole thing had been so manifestly absurd that he had not even taken the trouble to note down the names of any bystanders who had been amused at the wagon driver's antics.

The lawyer for the "victim" brought out the fact that the car cost \$6,000, that the owner was the head of a large manufacturing firm, and that he kept two other cars. With each new proof of the car owner's wealth, the jury became more sympathetic for the poor, humble, honest pickle-wagon driver—the victim of this rich, overbearing brute who went tearing along the roads, maiming, killing everywhere. They gave a verdict for \$1,800—for internal injuries—internal injuries to the barrel; or, perhaps, the pickles—?

A Cloud of Witnesses

WHEN the automobile first appeared certain members of the pedestrian class scowled, for they thought it was but the newest symbol of wealth. But one day some one got in the way of a machine, was hurt a little, and was awarded damages. That changed matters. The game caught on and has continued gayly ever since. While there is no denying that most deplorable automobile accidents have occurred—accidents for which no amount of damages could compensate—there is also no denying that the motorist is regarded, in many quarters, as legitimate prey, and that he is often victimized when entirely innocent.

I was dining at the house of a friend one evening when he was served with papers in a damage suit, in which he was charged with having run over a man and crippled him.

As he had never had an accident, he thought that some mistake in identity had been made. However, he turned the papers over to his lawyer, who investigated. The accident was alleged to have taken place, some months back, in the vicinity of Broadway and Forty-second Street—a well-selected neighborhood, since but few New York cars can deny its acquaintance. The case was clearly trumped up with the intent to mulct my friend. He, however, easily produced an alibi for the car. It happened to have been in Philadelphia on the date named.

"That will fix them!" he said.

But his lawyer advised him to settle out of court for \$200.

"Settle!" exclaimed my friend. "Settle with a crook who is in with a shyster lawyer, trying to do me? Not I!"

"It will be cheaper for you in the long run," the attorney insisted. "They'll take up more than \$200 worth of your time. Then there will be the expense of the trial, and there's always the strong possibility of an unfavorable verdict."

"Unfavorable verdict!" my indignant friend whooped. "Do you mean to say that you could find a bunch of twelve men in this town who would—who could!—" He choked with rage.

"I do," said the lawyer. "Have you ever heard any of these automobile cases tried? Have you ever looked over the kind of jury you're apt to find on them? Well, I have! I had a case of this kind only a month ago. We fought it. A hobo had been lucky enough to back out of the way of my client's car and into the arms of a shyster lawyer. He hadn't been touched—not within three feet. Yet he claimed damages for internal injuries, and the jury gave him \$900."

"But look at our alibi!"

"What's that to their witnesses?" demanded the attorney.

"Witnesses!"

"Of course. They always have witnesses. Your man has several."

"But how can there be witnesses to something that never happened?"

"It does seem difficult to grasp," smiled the lawyer, "but there often are. And a jury is likely to look at these matters impartially—balancing the sinful plutocrat's word against that of the poor but honest witness. 'These rich guys always try to lie out of things,' they reason. 'And this poor fella needs the money. Let's be generous and give it to him.'"

Ultimately my friend chose what appeared to be the easiest, cheapest, and quickest method of extricating himself—paying the "settlement."

And I, when I see men reposing luxuriously in their tonneaus, with their numbers swinging invitingly in the rear—I am no longer gnawed by the teeth of envy. For I know that their souls are not at peace, as is my foot-propelled one. Let them hit some one or not—in either case there may be damages to pay.

The graft against motorists, however, has been cut down in many ways. The roadhouse keepers used to charge them a dollar or a dollar and a half for a fifteen-cent meal. They went out and appraised the guest's car before naming their rates. The keepers of country garages, too, raised prices extortionately. But the automobile clubs and associations through the country have worked to remedy these evils. Garages and roadhouses were "licensed" for good-will patronage and scheduled in the motor publications. So about the only vicious form of graft that remains is the "accident." Pity the poor car owner! He gets it from all sides—inside and out.

\$200 per Scratch

RECENTLY a rich man's daughter got it from the inside. She was riding in a runabout which collided with a delivery wagon. Her chauffeur and her maid, who were in the car with her, have brought suits against her aggregating \$25,000.

A few months ago in New York, a car coming down a busy part of Broadway was halted at a cross street by the traffic. Between it and the curb a taxicab was

drawn up. A woman, dodging around the taxi, didn't see the bigger car until she stumbled against its rear wheel. She fell and scratched her leg. When she brought suit she got a "settlement" of \$200.

One night, a year or so ago, in one of our larger cities, when the streets were slippery after a rain, a man and girl crossed a corner diagonally into a park. They had their heads down and close together, and failed to notice an automobile which was almost upon them. The owner of the car, who was driving it himself and had his wife beside him on the front seat, put on the brakes. The brakes worked, but the car skidded a few feet along the wet pavement. As it passed the man the mud guard touched his elbow.

Insurance Helps Some

SHORTLY after suit was filed against the owner of the car. The "victim" alleged that he had been knocked against a fence (which was over thirty feet away), that his face had been badly cut, and that he was internally injured. The girl also filed suit for injuries and for loss of salary. And her father filed suit for a doctor's bill, for her board, which was unpaid because she could not work, and for other incidental expenses brought upon him by the "accident." Upon investigation by the company in which the car owner carried liability insurance, the case proved to be a manifest "frame-up." Nevertheless, they advised settling out of court, on the ground that a "skidding-car" case had never won a favorable verdict from a jury.

Many motorists carry liability insurance and pay big rates to companies which accept the liability for all lawsuits on account of injuries. The rates vary from \$35 a year for a small private vehicle to \$600 for a sight-seeing car, depending on the horsepower and use of the machine, and changing from year to year in accordance with the annual record of what the insurance companies have had to pay out for damages. The fact that they have had to pay so much has necessarily kept the rate high. But the fact that the claimant's lawyer ascertains, the first thing, whether the car owner carries liability insurance or not, reconciles the owner to paying it.

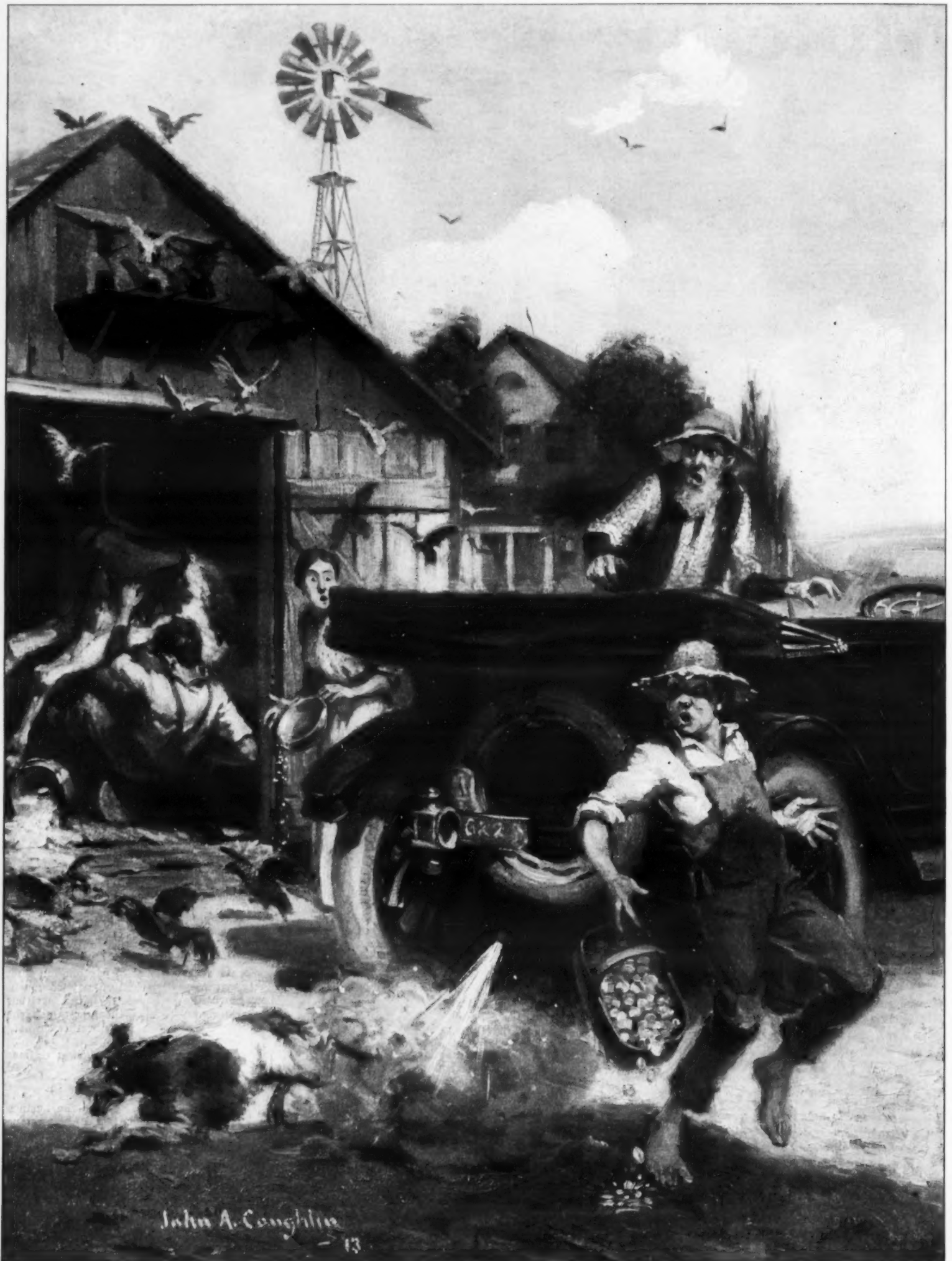
If the owner is insured, the dishonest claimant is likely to think twice before going to law.

How an Adjuster Adjusts

SO THOROUGHLY established is the business of mulcting the motorist that the insurance companies take the precaution to warn their clients against notorious "accident"-breeding districts, and nearly all the automobile clubs circulate "black lists." Experience with these localities has made cynics of the insurance adjusters. A good adjuster must be resourceful. His wits must be sharp and work quickly. But his exterior must be suave. He is able to weep with the bereaved widow, holding her hand. And while he presses it sympathetically, he can artfully guide it so that it is signing a release!

He goes to a palaver over a \$25,000 damage suit with guile in his heart and a huge bundle of real money in his hand. It may be composed of two or three hundred \$1 bills, with a few yellow-backs twisted carelessly around the outside. He shifts the weight of the bundle from time to time, but he doesn't press it upon the claimant after the first offer has been refused. The latter usually cannot stand the sight for long.

"Give me the money!" he shrieks. And the adjuster, almost with reluctance, "adjusts."



A Reminiscence

DRAWN BY JOHN A. COUGHLIN

Of course no one could blame Henry for being startled—but, just the same, it was lucky for him that strictly fresh eggs didn't happen to be selling then at the fabulous prices that they fetch to-day

Just as the casual pedestrian, with the terrible shriek of the electric horn crashing in his ear, holds the opinion that the motorist is a brute who delights in terrifying, maiming, and destroying other human beings, the insurance adjuster is apt to be skeptical as to the honesty of the pedestrian and the genuineness of "mother love." He will tell you that the black-listed neighborhoods are populated with people who rear large families solely for the purpose of having plenty of children to toss under the wheels of passing motor cars. He says that they will come forth with a suit, even if the child didn't land anywhere near the car.

"Yet these people claim," continues the cynical adjuster, "that motorists like to run over babies. That is not true. Running over babies is too expensive. The babies' bottles are hard on tires." That is a typical adjuster's "joke."

"It's nothing less than darddeviltry to drive around the Williamsburg Bridge neighborhood," said a New York adjuster, "and the Greek section down in lower New York, and certain quarters of Paterson and some of the other factory towns. Your car appears. Some one spells out its number. Shortly after you are served with a claim."

They have only to prove that you drove through such a street, and they've got you.

"They bring out a swarm of witnesses of their own nationality. For a few dollars cash and a share of the loot, those people will go on the stand and swear to anything. We know that because there have been cases in which the 'victim' hasn't come across with the cash, and the 'witnesses' have decided to tell the truth and teach him a lesson."

Supplying Relatives

IT IS contended by experts that approximately half of the claims for damages are fakes. Sometimes this faking is well organized and run on business lines. Such a scheme was exposed in a recent damage suit.

The owner of a car was driving slowly through a city street. Near a crossing a young man, who was rambling alone, reading a paper, actually walked into the side of the machine as it passed him. He was pushed away by a woman sitting in the tonneau.

Two weeks later a claim for damages was presented against the car owner. The young man alleged that the machine had borne him down and had so injured him internally that he had been thrown out of work. He added that an old father and mother were dependent on him for a living. The decrepit pair—a touching sight—were exhibited.

Investigation by the insurance company proved them to be important members of a gang which did a flourishing business supplying "relatives" in damage suits.

The gang was elaborately equipped with pathetic old fathers and mothers, destitute small children, and relatives of varying degrees of decrepitude and dependency. The specialty of some of the younger children was to make personal calls on the car owner being sued. They would appear about dinner time—the psychological hour to gain hunger sympathy—and sob out how "brother," injured and unable to work, was dying from want of food.

The lower East Side of New York is a nest for fake cases. Not long ago an Italian boy was riding a bicycle along the wrong side of a crowded street; he was a beginner and didn't know the traffic rules. He ran into an automobile and fell off his wheel. The chauffeur stopped and picked him up, but the boy said that he was not injured. He trundled his wheel off, and the crowd, which had collected, dispersed.

Switching the Scene of an "Accident"

WITHIN a week the owner of the car was served with a claim. He carried insurance, and a man was sent around to look over the ground. Two reputable grocers in the block, who witnessed the affair, testified that the boy was not hurt at all. This testimony was reported to the claimant, who was trying for a "settlement." Not feazed a bit, he switched the scene

of the accident to another block, filed suit, produced "witnesses," and went to trial. The jury disagreed! So the "victim" still has a chance of winning out.

Warned Just in Time

A YET bolder fake case was nearly successful. A man sued the owner of an automobile for \$2,000.

He alleged that the latter's car had run over him in a crowded street and had dislocated his shoulder. The owner protested that he hadn't been in that district for weeks. But the claimant had witnesses who swore that they had seen him receive his injuries.

The car owner carried liability insurance, and the company sent the best doctors to examine the victim. They found that he was actually injured, and seri-

are "runners" for the "half-and-half boys"—in other words, those lawyers whose professional fee is half of what can be collected. The nature of the case makes no difference with them. New York is notoriously overstocked with lawyers. And those men certainly needed the money who have been heard to remark: "Well, if there's insurance in it, we can get something."

Closely related to them are the "ambulance chasers"—lawyers or lawyers' "runners," who listen for the ambulance bell and then run quickly to see what's the chance for business. Some lawyers have an agent stationed outside each of the hospitals. The "runner" sees an injured man being brought in the ambulance and is ready with his greeting: "How'd you get your accident?"

He has been known to wear clerical garb and to secure a signature to a "confession" which is afterward used as a retainer.

A Sidewalk Friend

IN A CROWDED section of Chicago a wagon collided with an automobile. The jar was not sufficient to jostle the driver of the wagon off his seat. The woman riding in the car asked if he were hurt. He answered "No." Just then a man ran out from the sidewalk and began yelling at him in Yiddish. The driver quickly grabbed hold of his leg. He groaned that it was broken. The woman wanted to take him to a hospital, but he begged to be taken home. She did as he asked, and gave him a sum of money for medical attention.

A few days later suit for damages was filed against her. The bill of particulars stated that the driver's leg had been broken. The woman who owned the car carried liability insurance, and a representative of the company immediately went to call upon the injured man. He found him groaning in bed, suffering great agony. Suddenly the visitor snatched off the bed-covers. The sufferer gave

a piercing scream of protest and clutched at the departing quilts. As they eluded him, he went over the far side of the bed and under it—not because of bodily exposure, however, but rather because of the lack of it. He was fully clothed, even to his rough working shoes. Evidently he hadn't been expecting the call.

"His Leg Off—at Once!"

ANOTHER would-be victim, this one in Philadelphia, deliberately tried for his "accident" and guided his cart into axle-jolting proximity to a slowly moving automobile. Then he carefully tumbled over to the pavement. A policeman came up and bent over him. The outstretched man weakly whispered that his leg was broken. The policeman had seen the whole performance and was suspicious. He sent for an ambulance and, when it clattered up, whispered to the surgeon. The latter grabbed his instruments and made a hasty examination.

"This man is very badly hurt," he announced. "He's in a critical condition. Make room there! I've got to take his leg off—at once!"

But before he had finished, the man, so to speak, took his own leg off—took both of them, in fact, and so rapidly that the arrested automobile couldn't have caught up with him without breaking the speed laws.

That man had caught the right idea, but he hadn't developed it. He snatched his opportunity to be "injured," but in choosing his variety of hurt he didn't show imagination. "Internal injuries" are better. You can't amputate them. With their aid a farmer recently put over a fantastically absurd claim.

Bossy and Her Owner

HE WAS driving a herd of ambling cows along a quiet country road. A young woman, in a very light runabout, came up from the rear and turned out to pass the herd on a stretch of upgrade. When she was about midway its length a meddlesome old bossy suddenly turned and headed directly into the rear wheel of the machine. The bumptious animal sustained a scratch on her forehead. The girl drove on, rejoicing—for the sake of her little car—that she had been going so slowly.

(Concluded on page 36)



He clearly found it difficult to decide offhand which part of him was going to be "injured." The crowd howled. So did the policeman who had come up

ously. They reported that his shoulder was "done for"—that as soon as they would put the joint in place it would spring out again. Before they could give a definite, final report, they added, the man would have to undergo an expensive operation. And even then he might have a stiff arm for life.

The company realized that with his injury and sustaining testimony the man would easily get his award. They were trying to "settle" with him, when a circular letter came from an automobile club in another city. It warned motorists against a band who were suspected of being "fakers"—a professional "strong man" and some "witnesses," who had got away with their game in that city.

A Self-Dislocating Shoulder

THE victim was examined again, presumably to determine upon his injury with reference to the settlement.

Then it was ascertained that his shoulder was so constructed that he could throw it out of joint at will. He and his associates were sent to prison; but reports are still coming in from places where they successfully worked their game.

"Fake" cases abound in the overpopulated foreign districts of large cities because the streets are so crowded that it is hard for a car owner to prove that an alleged accident did not take place.

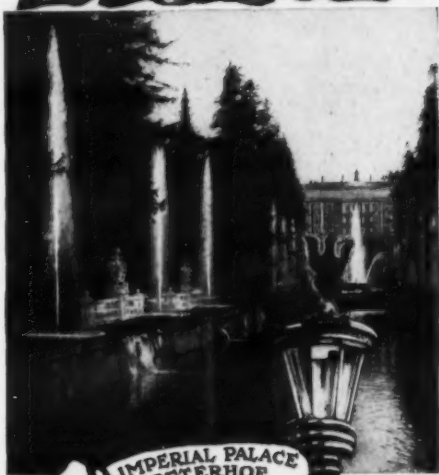
"Let your machine graze against one pushcart," said the cynical adjuster, "with no one standing within ten feet, and you're likely to get a half dozen claims within a week."

"And they won't settle out of court, either. Those foreigners like litigation. They like to make a show. They arrange a sort of little party and take their friends along to court as witnesses. Besides, they're suspicious of you. They're afraid you'll take advantage of them and cheat them."

One reason that foreign claimants prefer taking their cases into court is that they usually have friends who



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At the recent French Automobile Show, held in Paris, 110 cars were equipped with American speedometers. Of these 102 were equipped with our magnetic type instrument, leaving but 8 cars equipped with other Ameri-

can made instruments of the centrifugal type.

At the last London automobile show the magnetic speedometer was again on the greatest number of cars. This was accomplished in face of the fiercest kind of competition waged by a dozen American and English manufacturers of centrifugal speedometers.

At the recent Importers' Show held at the Hotel Astor, New York City, practically every car exhibited (and they were all foreign) was equipped with a Warner (magnetic) Auto-Meter.

At the New York Automobile Show, held at Grand Central Palace (American cars only) practically every car on the floor, costing over \$2,000, was equipped with a Warner (magnetic) Auto-Meter.

At the Chicago Show (held the latter part of this month at the Coliseum) the advance schedule shows that over 95% of the cars to be shown will be equipped with magnetic speedometers.

If you could follow the local automobile shows from city to city, all over America; if you could visit wherever high grade

cars congregate, you would, in almost every single case, find the Warner the only speedometer being used.

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And these are but a few of the abundant and noteworthy facts which should impress you with the importance of seeing that the car you buy is equipped with a Warner (magnetic) Auto-Meter—the world's high grade speed and mileage indicator. Do not take anything else. No matter how good the car, if it is not equipped with a Warner, the manufacturer is skimping on the equipment, at your expense.

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Evidently he hadn't been expecting the call—he was fully clothed, even to his rough working shoes

She was dumfounded when, a few days later, the farmer filed suit for damages. But she laughed when she saw the bill of particulars. It was too ridiculous.

The cow, so the farmer claimed, was hurled violently backward by the terrific shock of collision and "fell on top of him." He was internally injured and generally incapacitated—\$2,000 worth.

When the girl realized that his claim was going to be taken seriously, she became indignant.

"Why," she protested, "if there had been a real collision, my little car would have been 'violently hurled.' For the cow was bigger and came faster. Anyway, the man was back in the rear of the herd—twenty feet away. It would have taken a whole string of acrobatic cows, each performing a backward leap in turn, for one finally to have landed 'on top of him!'"

But a reputable lawyer conducted the farmer's case and won for him the sympathy of the jury.

Taking Advantage of Fate

IN ANOTHER instance a stroke of fate was utilized to give an odd twist in a "fake" claim for damages against the owner of an automobile truck. He received a letter from a lawyer in behalf of a client whose light runabout was alleged to have been smashed by a three-ton truck ten days previously. He turned the letter over to the company with which he carried liability insurance. The insurance people asked why the accident had not been reported to them immediately, as is the requirement. The chauffeur of the truck replied that the other car had merely jostled against the truck's rear wheel at a cross street; that the collision was so slight that he had paid no attention to it—especially since the runabout had done the colliding.

When the insurance company started to investigate, the claimant's lawyer exhibited the somewhat crumpled runabout. But he couldn't exhibit the victim, who had already died from his injuries; suit was being brought by relatives.

Tracing the dead man's address through the number of his car, the insurance company ascertained where he had lived. An adjuster, incognito, went up to call upon the relatives.

A young woman answered his ring at the door. In response to his inquiry, she looked at him suspiciously and replied that Mr. Blank wasn't in. The adjuster asked when he would be in. She didn't know. Would he be in that evening? She didn't know. Then the adjuster confided to her that he was a representative of the automobile firm from which Mr. Blank had bought his car, and that he was anxious to see him at once on business. At that the girl told him that her brother was dead.

The Chauffeur in the Master's Car

SHOCKED and grieved, the "automobile man" asked how it had happened. And wasn't it very sudden? Yes, she told him, her brother's illness had come on him unexpectedly, the week before, after an operation for swelling of the glands. Having secured his man's address and the nature of his illness, the adjuster went to the records of the Board of Health and learned there that the "accident victim" had died from the effects of a carbuncle on the neck.

In addition to showing that half of the claims are fakes, the records reveal that over a fourth of the real accidents occur when cars have been taken out without the knowledge or consent of the owners. And if a chauffeur thus takes out his master's car and has an accident, due to whatever daredevilry or negli-

gence, it is his master who is liable unless he makes and prosecutes a criminal charge of theft against the chauffeur. The owners are usually unwilling to do this. And, in the comparatively few cases of the kind that have come to trial, it has been difficult to convict the chauffeur. The law is very elastic.

Joy Rides

A MASTER ordered his car to call for him after the theatre at eleven o'clock. The chauffeur started out at seven—to go a mile! He picked up a gay party and they had an accident. A damage suit was filed against the owner of the car, and he refused to accept the responsibility. He took action against the chauffeur. But it was ruled that, at the time of the accident,

the chauffeur was on his way to the theatre and was obeying his master's orders. So the latter was held liable.

And many cases are on record where chauffeurs, to save their faces, have testified falsely regarding real accidents, and have thereby brought additional trouble to the owners. Not long ago a chauffeur ran over a man. His version of the accident was elaborately complete. He said that he picked up the man, who was scarcely hurt, and started to take him to the hospital. The man changed his mind and wanted to be taken home, then changed it again and wanted to be taken to the hospital, and went on changing it back and forth about a half dozen times—according to the chauffeur. His master believed the story and repudiated the claim—which had been presented by the injured man's relatives.

Within two weeks the victim of the accident died in a hospital. He had several internal injuries, including four broken ribs. His claim was just.

Technically, a "joy ride" is constituted by a chauffeur's taking a car out without its owner's permission and driving recklessly. When it can be proved that an accident is due to a real, hope-to-die joy ride, the owner can shift the responsibility to the thief who stole his car. But some of the most grimly amusing damage suits, following a so-called "joy ride" which has come to a smash-up close, have been cases where the owner of the car himself was host and his gay guests have turned on him and sued him for damages. This is mulcting with a vengeance!

A man crossing, with his racing car, on a ferry-boat into New York, "picked up" two girls and took them riding. They wanted—and no doubt shrilly—to see "how fast he could make his car go." So he showed them. He was really doing very well, too, when he collided with an elevated railroad pillar. All of the party were thrown out and hurt. One girl lost a leg in the result and sued him for \$50,000, coming to court with her wooden leg—which always pained her in wet weather.

The case went through several appeals, varied verdicts being given, the prevalent opinion being that the car owner was responsible for the injury of his at least semi-self-invited guest.

Another man took his car to Coney Island one night and "picked up" a girl. They were tearing along the Boulevard, about midnight, and crashed into another car. The owner of the second car threatened suit. So did the girl.

Her erstwhile host, for personal reasons, didn't wish the story of his "joy ride" to come out. Neither did he want the girl to know she had a case against him, nor that he was afraid of a suit. So he went through a complicated deal in which he paid the owner of the second car a settlement, which was big enough to allow the latter to pay a settlement to the girl. She was persuaded that the second man was the responsible one, and took the money.

Some youngsters were roller skating along a street and dived pell-mell into the headlights of a car standing by the curb. They smashed the lights and their several heads. Suit for \$25,000 was brought against the owner of the car. His lawyer advised him to settle out of court for \$1,000.

He was luckier than a man who left his car, brakes set, by the side of an inclining road. Some inquisitive children came along, climbed into the car, and began playing with the brakes.

The machine started up. It coasted down the hill, turned, ran up on a lawn, and dumped the children out. They were hurt variously, and the old gentleman who owned the car was sued. He had to pay \$2,200 on the count of "criminal negligence."

Gratitude and Its Payment

AN INSURANCE adjuster told me the story of a boy who ran in front of a car, darting in so suddenly that the chauffeur didn't see him. Luckily, the car was traveling very slowly and the boy was not injured beyond a dislocated knee. The owner of the car was an unusually kind-hearted man. He took the boy to a hospital and personally engaged the best care for him. He learned that the parents were poor and gave them frequent help. They appeared pathetically grateful. They told him that the boy had inherited tuberculosis, and was very delicate. But, for all their gratitude, they sued him for damages. They alleged that the accident had ruined their son's health, and left him delicate. And they were awarded damages of several thousand dollars by a sympathetic jury.

The Hopeless Poor

By Walt Mason

I HIRED six human critters, a barbed-wire fence to make. "I'll feed you pie and fritters, and tempting sirloin steak," I said, while them engaging; they answered: "Bless your nobbs! For we have long been raging because we have no jobs! Our souls were sick with sorrow—your offer drives it hence; we'll all show up to-morrow, and build ten miles of fence!"

Next day Aurora, queenly, announced a smiling dawn; and I went forth serenely to see those men of brawn, to see the men I'd captured when they were sad and blue; I thought they'd be enraptured that they had work to do. But only one was waiting, outside my cottage door; and he his teeth was grating, and painfully he swore.

"I've thought the matter over—the wages don't suffice; you'd surely be in clover, to get me at your price! The other sturdy yeomen who said they'd come, mayhap, now see in you a foe-man, and in your job a trap. You are another Cræsus, who'd trick with specious spiels, then grind our brows to pieces beneath your iron heels. Far better 'tis to suffer misfortune for an age, to be a ragged duffer, and never

draw a wage, to droop in alsoranhoo, in mildew and decay, than sacrifice our manhood by taking what you'd pay!"

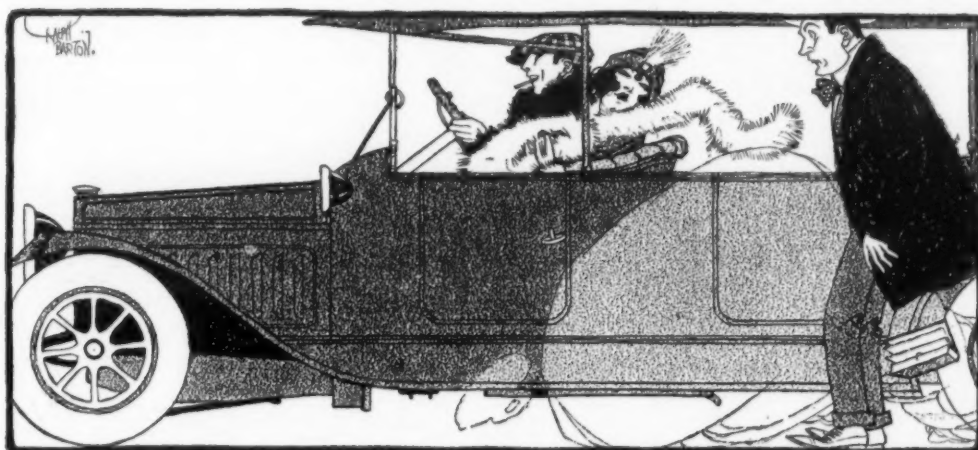
Thus spake this sturdy toiler who did not fear to face the stern, despotic spoiler e'en in his native place. I heard his scathing sally concerning greed and pelf, then chased him down the alley, and built the fence myself.

I've hired a thousand mortals to do a thousand chores, to lubricate the portals, or fix the stable doors; to dig the sweet potatoes, to herd the bumble bees; to pick the canned tomatoes and turnips from the trees. And of the thousand fellows a dozen kept their voices, and came to blow the bellows or shear the spotted cows.

I often used to wonder where all the poor folks grew, what ill fate kept them under, what grief their spirits knew. I've pity for the needy, the slaves of want and pain, who find the gardens weedy that they had sowed to grain. But I am tired of paupers who won't accept a job; the stern, high-minded paupers whose souls with anger throb, unless a silver platter is used to bring them work, whose never-ending chatter shames Cicero and Burke.

The Ameba and the Auto

By
Homer Croy



ILLUSTRATED
BY
RALPH BARTON

PEOPLE can talk all they want to about how much girls like brains and culture, but as for myself give me a low-brow automobile every time.

I am a wiser man than I was a few months ago—gallons wiser.

At that time I was backing learning over the limousine, but now the sight of an encyclopedia no longer gives me a thrill. In fact, I now have several late models for sale at a surprisingly reasonable figure.

A few short months ago I was entertaining the fairest flower in the world every Sunday night by telling her about the ameba, which is the lowest form of life, and rocking her in the lawn swing until the dew began to fall. She seemed much interested in the meek and lowly ameba and in seeing a six-passenger brain going at full speed. This was mine—not the meek and lowly's.

EVERY evening was different—and all costing about the same. Some evenings we would look in the family album and I would try to settle that momentous question where her eyes came from, who had had her ears, and who was responsible for her mouth.

Leta seemed perfectly happy just to sit around holding a rose of a Sunday evening and listening to my coast-defense brain in action, without going out and having money spent on her. She seemed far above that.

The rest of the young men in Maryville were depending on their money to get them through, while

I went quietly ahead cultivating my brain. I was glad that Nature had given me a long-stroke brain instead of my father having given me a desirable corner.

I told myself that a girl would rather have brains any time than bullion.

When I was stopped by a friend one day and told that I had a rival, the blood rushed to my head. Tremblingly I asked who it was.

"Herb Hull."

ILAUGHED heartily. Herb Hull had nothing but money—an automobile. He hadn't any brain worth speaking of—just a light roadster. He had never heard of an ameba—he wouldn't know whether there was a bounty on them or whether they came under the closed-season law. It wouldn't take me long to get rid of him.

I longed for an opportunity to show Herb Hull up. If I could get Herb and Leta together I would soon make him look sick.

One evening when I came to call there was a long, straight-line, mohair-top, air-adjusted automobile standing out in front of Leta's gate. I smiled to myself at how quickly I would make that machine fade away.

Seating myself, I turned my back squarely on the shallow-brained creature whose father had more money than Latin, and began talking about the ameba. I told how the ameba ate by rolling up against a particle of food and folding its body around it, and how that the stimulus of a ray of light or of a needle would make this small watery animalcule move. While I was explaining to her how the ameba, although no larger than the head of a pin, divides and makes two, I caught her studying Herb's profile. So I hurried on with more about the ameba, but all the time Leta kept looking at the way his hair was combed back like a collar advertisement. I felt instinctively that it was not a good sign when a girl studied the other fellow's profile.

Leta was not gripped by the ameba the way I should have liked; she was willing to let the ameba forage for itself.

IDECIDED to say something to Herb that would show up his ignorance—something that would show that he was completely outclassed and that would rankle in his bosom for months and months—even years.

Suddenly I turned to him and said: "What do you think about the cellular structure of the ameba and of other protozoa, Mr. Hull?"

"I think it's too bad, but I don't see what can be done about it," said Herb, drawing on his gloves.

Then I noticed that Leta was drawing on hers, too.

"I guess that amebas are all right," said Herb, arising and holding out his arm, "but they haven't got any great hold on me," and with that he opened the door and escorted Leta to the machine.

I rushed after them, trying to think of something else to tell Leta about my favorite cytoplasm, but in a moment I was coughing in the gasoline odor.

The machine had faded away all right.

IFELT that she would soon grow tired of Herb's prattle, so I sat down on the steps to wait until she should ask him to bring her back. I waited and waited, but she did not come. His prattle was wearing surprisingly well.

At last I dragged my weary way home and read up more interesting points on the ameba.

I thought that one evening with the shallow-brained man who didn't know an ameba from an abacus would

be enough for her, but the next time I came around to continue my biological discussion Leta greeted me absent-mindedly. I began at once to talk about the unappreciated inhabitant of the stagnant pool, but Leta kept looking out the window toward the front gate.

An auto horn called and Leta's eyes lighted; then in a moment I found myself alone with the family album.

Leta didn't pine for brains the way I thought she did. Since she had met Herb the brain and ameba market had slumped sadly with her.

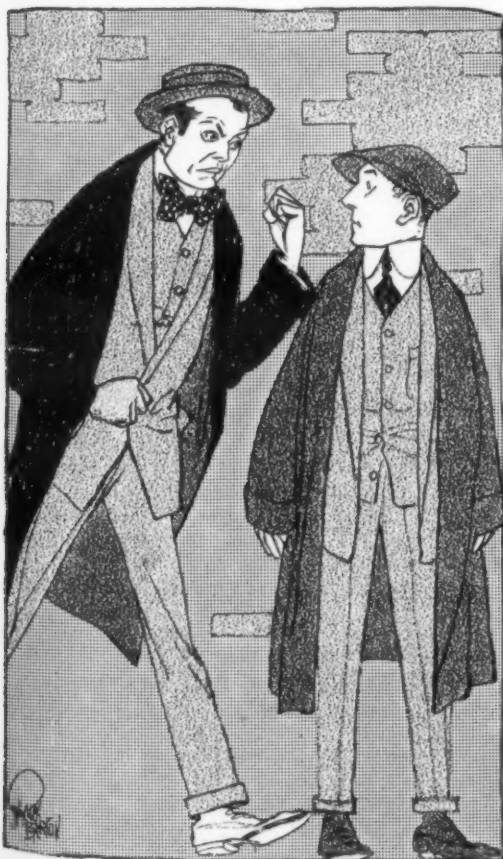
One evening when I came to call I came upon them unexpectedly, sitting on the same end of the sofa, and Leta's dog scratching at the door, thinking that somebody was calling him.

So this was what he was using his automobile for—to steal a kiss! It made my blood boil. I waited downtown for him the next morning, determined to settle with him—even if I had to go to jail for it.

RUSHING up to him, I planted myself in his path. "What do you mean by taking liberties with Leta?" I demanded, shaking my fist.

"Oh, hadn't you heard!" he exclaimed. "We are to be married to-morrow and go on an automobile trip over the West!"

On the way home I dropped in to see an automobile dealer. I told him that I had gone out of the gray-matter business and from now on was going to specialize in gasoline. The ameba is all right in its place, but when it comes to entertaining it can't compete with a nonskid.



"What do you mean by taking liberties with Leta?"



Leta was not gripped by the ameba the way I would have liked

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[Signature]
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Rubaiyat of the Motor Car

After Omar Khayyam

By C. Roy Clough



RISE! The morning sun has scatter'd into
flight [night,
The stars before him from the field of
And now before unfolds the good broad road—
Ready and waiting in the morning light.

Before all dark of night had died,
While some dreams lingered close beside,
Methought a voice said: "Friend,
When all is ready, why linger you?—come, ride."

And as the motor hummed, those who stood before,
We left them there about the open door—
You know how little time there is to ride,
And moments gone are ridden in no more.

Now the new car reviving memories old,
In all her moods and tenses, shows pure gold,
And as the road slips back and far away—
Makes glad the heart, to think we last year's sold.

Come fill the tank and make the motor sing,
Your every worry to the breezes fling,
The bird of Time has but a little way
To flutter—and the bird is on the wing.

Each morn a new chance brings, you say;
Yes, but where is the chance of yesterday?—
Gone with that of days before,
Not to return again this way.

With me along the pike of hard limestone—
That parts the fields with new grain grown,
Where all and everything's forgot—
But present joy with which this hour's sown.

A roadster builded just for two—
Bright sunshine, pretty road and pretty you
Beside me riding fast and far—
Oh! this is Paradise, 'tis true.

Some want the riches of the world, and some
Wait for the promised Paradise to come;
Ah! take the motor car, let all else go,
Nor heed the envious neighbors' hum.

Look to the moving cars about us—go
Honk, honking on the highways fast and slow,
Then hurry and join with all the rest,
Lest waiting overlong you sorry grow.

For those who hugged their bank roll overtight,
And then dropped out and left it one dark night,
Did they this old world so impress—
That they'll be famed an ever shining light?

The motor car you wanted and set your heart upon
Cost overmuch, or stocks went down anon—
Stop worry with this consoling thought—
Next season, mayhap, its shine would all be gone.

I sometimes think that never road so great
As where some master motor met its fate,
That every smooth and lovely stretch
Rolls smoother for those wheels of earlier date.

And this wide track so straight and fast,
Where each mile seems better than the last—
Ah! ride upon it thankfully, for who knows
How much we owe to motors that have passed?

Ah! motor friends, take the ride that clears
The brain of past regrets and future fears
To-morrow! Why, to-morrow we may be
Ourselves part of old times adding years.

For some we saw, the happiest of the gay,
We've met and hailed them many a sunny day,
Have had their ride, their motor's idle now—
They've one by one gone on a longer way.

And we that now ride happy in our car,
O'er roads they knew, both near and far,
Ourselves must we our motors stop—
Leave all for other folks to make or mar.

Ah! get the most from days we yet may spend,
Ride fast and far before we needs must send
Our cars to long disuse—
Sans road, sans load, the long trip's end.



Gasoline Gypsies Four

By Martha L. Root and Roy C. Wilhelm

TO THOSE who wish to journey a little apart from beaten motoring paths and to those who would travel at nominal expense, close to nature, this simple account of a gypsying trip may prove a mental run into a terra incognita. It brings one into a land filled with the delicacy and charm of roadside feasts, of camp life, of wild mountains and glorious sunsets, and, incidentally, it recounts the caprices of a motor car.

It was like this: A young man decided to take his parents and a friend on a gypsying trip through New England. Having been surfeited with the usual tours, he declared he wouldn't give a cent a mile for the big hotels. He wished a real camp of his own, one which could be squeezed into his motor car somewhat as snugly as a shoehorn might turn the trick. He held memories of quaint farmhouses, where the owners were often "original pieces," whose Yankee dialect and many kindnesses made "blends" as fragrant as his own coffee bean.

The Outfit

WITH the earliest days of spring, during hours of inactivity, his mind would begin the trekking in his office. He often found himself driving tandem, coffee trade and motor car, over roadways lined with woods and tangled underfoot with fringes of fragrant wild grape and bright corn flowers. He was so chockful of sporting zest to get the outfit mentally stored into the family car that he forgot his figures in pounds, and began to reckon in ounces and inches. Recalling opportunely the phrase, "If business interferes with pleasure, cut out the business," he still managed to save some time for the acquirement of "compressed cash" for future gasoline. He appointed himself Chief of the "engineering department." His mother was to be the Poet-Cook, his father Commissary, and his friend could act as "Peelot." The car was designated "The Lady."

The entire baggage weighed 325 pounds. Each "officer" was limited to twenty-five pounds. Every true caravanserai knows the importance of packing snugly, so even at the risk of being prosaic I detail the load. If it seems too liberal, it is because Chief quoted the old saw: "Tis better to cry over a thing than for it." Three heavy waterproof bags were securely strapped to the running boards. The bottoms were placed forward to prevent rain from entering, and a square of thin oilcloth "aft" to keep out the dust. The first bag contained the wall tent, fly, thirty feet of rope, and two army blankets. The second held the two pneumatic mattresses and bedding, of which an ample supply is advised. These were balanced on the other side by the tent poles, the big umbrella, and the third waterproof bag, containing the cooking utensils, large waterproof cloth, and sundries. It was likewise strapped to the running board.

The Tent on the Running Board

A SHOE box of tightly compressed waste was tied to the frame under the hood in front, and on the opposite side were three quart cans of lubricating oil. (It is better to use the oil which one *knows* to be good than to chance the "sorghum" sometimes sold by wayside garages.) There was also kerosene for the lamps and for the compressed air blue-flame oil stove. Tent pins were carried in a small grain bag under the rear seat. A luggage rack in the back would have been useful, but this space was for the spare tires. The tent poles were "scarfed" (jointed in the center) to fit the



The flashing waters in the sunlit lake lay like meadows of diamonds below

running board, a scheme that was also applied to increase the height of the big umbrella, which, in its waterproof cover, was fastened along the top frames.

Every Inch of Space Utilized

THIS umbrella was to serve the purpose of a small extra tent to shelter the supplies from the dew and to relieve the congestion which would occur by having everything under the fly. A large portion of the fly is always necessarily occupied by the table. The umbrella could also be utilized if grim necessity required the changing of a tire during a storm. An army blanket and a heavy comfort were carried under the rear cushion and two smaller blankets under the forward cushions. Tucked in with the bedding were white net curtains which could be hooked to the inner tent walls at both front and rear, making the place as comfortable and dainty as a Juliet's chamber.

The wood frame under the front seat was cut out an additional inch on both sides, to allow the carrying of extra lubricating oil and small cans of a certain grease in the few inches thus gained between the sides and gas tank. An important item not to be overlooked in the cargo was a dozen boxes of Swedish safety matches. Small pouches, 9x12 inches, made of ticking purchased at a ten-cent store, were attached

to the four doors of the car as well as to the dash, the wire hooks at the sides going through little screw eyes inserted for the purpose. These were for small articles, the "hand bags" of the four nomads.

The Pantry Under the Seat

THE most novel feature was the combination pantry and table, built by Chief exactly to fit the space in the back seat. It was half-inch basswood, eighteen inches high, with hinged leaves folding at the back and front. The latter could be raised when luncheon was served in the car. The lower front section was removable so that it could be passed to those in front for use as a lap tray. The lower corner was partitioned to hold the compressed air oil lamp. This space was lined with tin, and four layers of blotting paper were also carried under the stove. To allow the escape of any aroma of kerosene, several holes were bored in the outer wall. Three-eighth-inch material was used for the remaining partitions. The whole was securely fastened together with screws, as nails would not have stood the continued strain. Handles were placed on the ends and these were securely tied to the guardrail.

Other little accessories were two one-quart vacuum bottles and one pint bottle. Empty cloth sugar sacks were also put in for carrying potatoes, onions, and other vegetables. A dozen ten-pound paper sacks were to be used for all scraps of paper and food, so that no trace of luncheons need be left to mar even woodsy spots. Specially useful were two one-gallon flannel-covered canteens, each having a shoulder band for carrying. When the flannel is wet, evaporation cools the water, reducing the temperature several degrees.

What Is So Rare—

LITTLE square pillows were carried in a small khaki pouch suspended between the roof frames, and in front of it was a second pocket for carrying sweaters and raincoats. Small suit cases were strapped at the top of the back seat and larger ones were wedged in the middle of the back seat. When everybody was packed in, each was as "comfy" as a pea in a pod, and had fully as much room!

After rolling out of the busy hubbub of the metropolis, the first day's course was steered through the beautiful Croton Lake district of New York State and on up into Connecticut. Lowell would have found out what is so rare as a day in June if he had been along that splendid August morning.

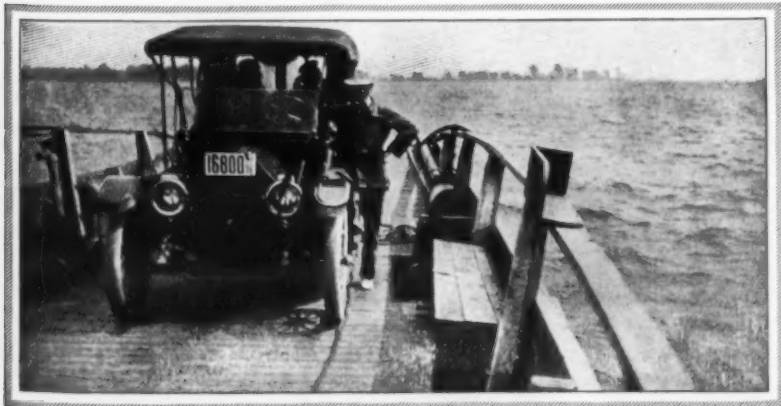
Each turn in the road brought some unexpected glimpse of distant wooded hills, and the flashing waters in the sunlit lakes lay like meadows of diamonds far below. Cowbells tinkled from the pastures and occasionally squirrels chattered a protest.

Chief hinted that possibly after three weeks his crew might become "toughened to the joys of the country." But instead of their artistic sinews being overtrained, they attained, Chief later declared, a development almost Samsonian with each day's marvelous changes in landscape.

The Spirit of Adventure

A FLURRY was caused the first afternoon by Poet-Cook losing her heavy black petticoat, which blew from the upper pouch. It was rescued by Peelot and safely restored, Chief ejaculating: "That's nothing, we shall probably lose several years off our shoulders before we get back home if this spirit of adventure is as 'catching' every day."

There was a "lay-off" for luncheon at one o'clock.



"The Lady" ferrying across Lake Champlain at Chazy



The spot where we pitched camp by Lake Champlain

This was the premier of a long series of delicious banquets served in Nature's spacious dining rooms where appetite and mind and soul can truly feast. Conventional motorists speed from place to place and dine in fashionable hotels, where perhaps six strong men stand to refill one's glass. Only gypsies know the joy of foraging and the tonic of wood smoke. This band ate leisurely in the privacy of the great outdoors. After each meal they explored the rocks and hills, culling wild flowers new to them, and studying strange birds. "Space annihilators" probably swept up the main road, their cars passing "The Lady" without so much as poking their noses toward hers in friendly greetings, but they missed scenery and that sacred feeling Nature accords to those who vibrate in tune with her.

After a genial day's run, the first night was spent at a little inn in Cornwall, Conn. The head of the house and Poet-Cook found themselves domestic affinities, and the Cornwall woman agreed to dry some corn and express it to the city home. The whole family, quite naturally, seemed to go hunting for winter spoils. In the four weeks they arranged for so many delicious foods to be sent home that their December table must constantly remind them of the summer's pursuit. A Vermont farmer's wife canned blueberries. (Chief was very particular that the crew said "blubury" just as did the natives, but the Vermonters were never to be fooled!) A Massachusetts woman made blackberry jam and a New Hampshire friend parcel-posted a box of the wonderful apples, "Yellow Transparencies." Camping comrades freighted little cedars, hemlock and tamarack trees to plant, as well as big slices of birch bark for picture frames. Pine pillows were slipped in just for good measure, one bearing the touching words: "I pine for you and sometimes balsam!" In Vermont Poet-Cook engaged a capable housekeeper.

Leaving Cornwall that second sparkling morning, the petroleumites fared forth in mood hilarious. Commissary stood and called out greetings to boys in the barren bowlder sheep pastures, just to keep from "bustin' with joy." The little phrase, "Best day of all," appeared that morning and was worn dally to something worse than silk stockings in blackberry brambles, but it held until the day of disembarking, when each one purposely refrained.

Delectable ozone was in everybody's spirits except "The Lady's." Chief thought it was the carburetor, and he mixed the "gal" every variation of gasoline breakfast from "lean" to "fat." For two hours, with lightning nerves and steel muscles, he worked to discover the cause of such intermittent balking. The running board was too full to open the "fore" door on his side—and, unfortunately, he was not twins! He tried to relieve his tension by stopping work a moment and taking a picture of some fragrant clover-blossomed meadows. "Does this bit of country bring us nearer heaven or does it only seem to? The bees hum so rhythmically and the clovers are so heavily laden with bright color and perfume, I will pinch Peetot to see if I am only dreaming."

Another grind at the sulking motor brought Chief back to his common senses. He was resigned, though, this time, and said to the "deck hands": "Ten miles from here there is a lovely spot 1,600 feet above sea level. It is the home of a well-known New York surgeon. From its novel bungalow, fashioned after a sixteenth century eight-sided wool market in London, we can look sixty miles and see New York, Connecticut, and Massachusetts. We will make the detour and have a short day, and I will take this pesky car to a garage early this evening."

Romany Rye

THE trip was almost ended when "The Lady," wholly indifferent to her faux pas, had the impertinence to stall forty feet from the portecochère of the stately country house. As Chief was preparing to present his card, the surgeon himself came out to greet the visitors. His wife was away, but he called his son, who took the guests in the doctor's big touring car over the estate, and then up to the wigwam.

This bewitching little wigwam, set on a high Connecticut hilltop in a grove of birches, was a regular

"Sun-in-the-Face" kind of place where totem-pole charm had truly brought real China to the dining room, wood wild flowers to the table, and a white man's range in the kitchen. We were insistently invited to camp overnight, and the surgeon's son, who probably never before had shelled a pea, plunged actively into the supper getting. After everybody had enjoyed a bountiful supper—because each had worked to get it—the surgeon and his wife, who had now returned, came up to spend the evening—and brought a maid to assist with the dishes.

Chief slipped out to play airs on his ocarina, an effect which was exquisite in that sylvan wonderland. The surgeon a little later invited all to join him around

Next morning the motherly New Englander arranged that the automobilists should have the spice of journeying behind that almost extinct animal, the horse.

This one was laughingly called Threfts, which the son of the house explained was "fair, fat, and forty." In the comfortable carryall they were jogged along to historic Lexington, where the hostess showed them the "old, ancient relics of antiquity"! A trip through the thirteen original colonies is so filled with historic interest that travelers should carry along "spare" brains to help them catch all the echoes of fact and fancy which reverberate from hill and valley.

The first Saturday out the gypsies had the joy of pitching camp on Lake Winnisquam south of Lake Winnepesaukee, in New Hampshire. With the zest of playhouse days the canvas was coaxed from the bag and the little khaki house stretched up into reality.

The fly formed a front porch overlooking this still, cameolike stretch of water with its fairy islands and marvelous changes in coloring. The gypsies troubled themselves little about its Indian history and traditions. They were not rediscovering America that afternoon, not even remembering schoolbook knowledge, for their eyes were too ravished at every turn by the graceful scenic pictures.

Poet-Cook made apple sauce from red Astrakhans. She cooked peas, corn, and potatoes, and boiled bacon over the compressed air blue-flame oil lamp. To Commissary's marvelous supplies friends and farmers had added gifts of angel food, blueberry muffins, homemade bread, and blackberry jam.

The pantry table from the car, surrounded by artists' folding tripod seats, made the "dining room" exceedingly attractive. A farmer boy rowed up to the bank and, as a welcome, tossed from his boat a few white water lilies, delicately kissed with pink. As the feast progressed, motor launches and canoes kept passing by, their occupants singing salutes, one calling out to the campers an invitation for a ride.

The farmer on whose land the tent stood, a "husky" of 245 pounds, brought down an old one-piece buffalo robe, the kind almost vanished now, and said: "This may come in handy before morning."

Just before retiring, the gypsies took a swim in the tranquil water. The sun had added its warmth to the cooler mountain waters, and complementing the comfortable bathing was the bracing air. A full moon looked joyously down on the playful swimmers.

Strenuous days led to nights of deep sleep. If occasionally one woke, it was only to feel thankful he could look out upon a starlit lake, dotted with little isles of paradise, and then know he could roll over and take another sleep. There were no alarm clocks to jar or jolt the vacationists from their natural rest. It was truly a timeless month, for no one ran on schedule; no calendar was carried and no member of the crew ever bought a newspaper, except for wrapping purposes.

There is much to do in camp. Commissary scurried for food; Chief motored over to Laconia for more table luxuries; the Poet-Cook evolved dishes fit for an emperor but not a whit too good for her little family. Peetot steered the pots and pans, often assisted by the men, for they were real suffragettes.

Stevenson says: "To journey happily is better than to arrive," and so it seemed.

After packing the tent nicely on Monday, they moved along to larger joys. Each time Chief would suggest an early start, but with a whole house to be bagged and "The Lady's" "toilet" to be made, it was usually ten o'clock before the party had exchanged good-bys with their farmer friends and anchor was actually weighed.

The Gypsies Seize a Cottage

IN North Woodstock, N. H., "some class" was shown by taking "a cottage" for the night.

"Idlewild," the two-room log cabin, was situated in a grove of spruces on high ground, commanding a majestic view of Franconia Notch and the White Mountains.

From Woodstock, the way was through Twin Mountain, Profile Mountain, Bretton Woods, and down to Crawford



Undaunted, "The Lady" climbed upward to "Camel's Hump" in the Green Mountains of Vermont

an immense watch fire guarded by sentinel torches. Meantime, the chauffeur, a real "motor surgeon," had been down in the driveway making several exploratory incisions and various adjustments on our stalled motor, and had finally rolled her back to the garage, as he hoped, cured.

A Fairy Grandmother in the Right Place

THE third day's run was up through the picturesque Berkshire hills. The roads resembled a continuous billiard table. Leaving Lenox, the journey was continued up through Massachusetts toward the White Mountains. In Lincoln, Mass., the gate of a comely grandmother's residence swung inward to the gypsies as cheerily as if they were her own kin. It was a house a century old. The table was laden with the delicious bounties of the whole

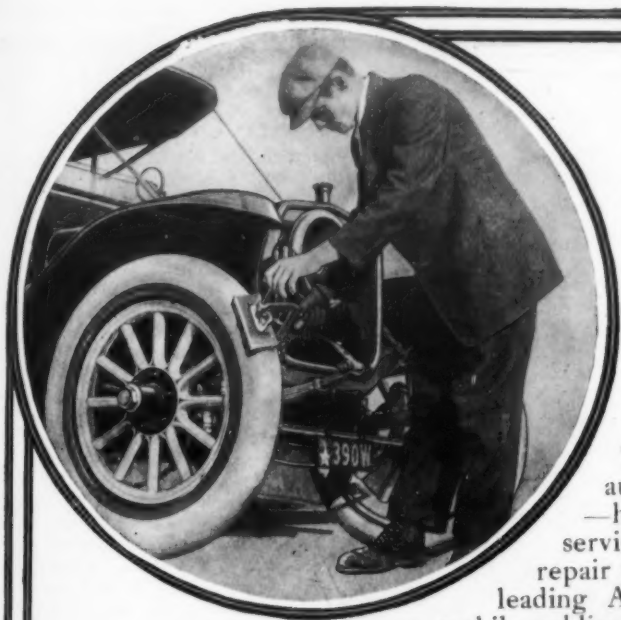


From Woodstock, the way was through Twin Mountain, Profile Mountain, Bretton Woods, and down to Crawford

countryside, and after a big supper the dear soul took the motorists out to see her kitchen. With the brasses of the sixties ranged a 1913 electric toaster, bread mixer, flatiron, and beyond, in the woodhouse, was a new electric washing machine.

She opened a great pantry cupboard and handed out peppermints, which only she could have made so toothsome.

"These toasted almonds I have made for you, too," she added, "but I am keeping them to pack with your lunch to-morrow." In the front parlor later she told of her life in Lincoln, and how the cordial Congregationalists completely wore out her white kid gloves the very first Sunday she went among them as a bride. Her stories were rare pictures of the very heart of ideal New England.



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This handy little book is brimful of practical information about automobile tires. It tells what to do for every kind of tire trouble—how to treble your tire mileage—how to get the most service out of your tires, and how to vulcanize and repair your own tires at home. The leading American and Foreign automobile publications quote "Care and Repair of Tires" as authority. We will gladly send a copy on request to any motorist, free of charge and without obligation.

SHALER

Vulcanizers

Save Your Tires — Save Repair Bills
Prevent Blow-Outs — Treble Your Mileage



Model D-81 \$12⁵⁰

You can repair any puncture, blow-out, tear or hole in any casing or inner tube—anywhere—in a few moments with a Shaler Vulcanizer. It vulcanizes thoroughly and makes the repair the strongest part of the tire. Every Shaler has automatic heat control which makes it impossible to overcure or undercure the tire. The Shaler does not need to be watched. It works automatically—by electricity. Simply adjust the Shaler Vulcanizer, attach to any electric light socket, and it does the rest. A boy can operate it.

The Shaler is the Standard Vulcanizer used by the best garages and repair shops everywhere. We make the only complete line of vulcanizers, from the little \$2.00 Vul-Kit for mending tube punctures to complete Garage Equipment. We are the largest manufacturers of vulcanizers in the world and our complete line includes vulcanizers of every type—Electric—Gasoline—Alcohol and Steam for every requirement.

A Shaler Vulcanizer Soon Pays For Itself By Saving Repair Bills

but you do more than save repair bills—you save time and trouble and at the same time save two-thirds your tire cost by trebling the mileage you get from your tires. Buy the best tires and keep them in good condition and watch the saving in trouble and expense. Mend the little holes and little cuts and prevent blow-outs, and punctures. Carry a Shaler Vulcanizer as part of your regular equipment, then you can quickly "Seal the Cuts and Save the Tires."



The Shaler Vul-Kit \$2.00

is a low-priced quick repair vulcanizer that mends tube punctures as perfectly and permanently as the most elaborate outfit. Can be used anywhere as it is so compact that it will fit in a tool-box. All progressive garages and dealers carry it in stock, as it is the best selling motorist's accessory on the market. Will burn gasoline or alcohol which rids it of the flame, soot and smoke attendant upon the use of all other small vulcanizers. The only one with a generator that converts the fuel into gas and produces and maintains temperature high enough to vulcanize a repair clear through instead of on the outside only. When the repair is vulcanized the generator is automatically extinguished. Tubes are mended on a plate inlaid with asbestos to retain the heat and prevent pinching tube. Vulcanizing surface 3½ in. in diameter. Universal clamp gives equal pressure on the tube, insuring smooth repairs. Handle, always cool, permits removal of vulcanizer from the tire while hot. Anybody can use it. Furnished complete with repair material. Fully nickelled—will last a lifetime.

Shaler Model "D" For Motorists—\$12.50

Operates from city lighting current. When ordering, state voltage of current and whether it is direct or alternating. The Model "D" is a safe, clean vulcanizer for the motorist's own use at home. Any motorist or chauffeur can mend tubes and casings perfectly with it. The exact vulcanizing temperature is maintained by a thermostat which automatically makes and breaks the circuit—giving automatic heat control. There is no possibility of overcuring or undercuring the tire. No watching or regulating necessary. Easily attached to any electric light socket. It vulcanizes two tubes as quickly as one. Repairs Blow-Outs, Cuts, Tears, Punctures, etc. A 3½ by 7 inch repair can be made at one setting, and larger repairs by resetting. Heats in a few minutes and costs but one-half cent an hour to operate. Furnished with ten feet of conducting cord, U. S. Govt. tested heat gauge, Para Rubber, cement, and illustrated book of instructions. Finished in polished nickel. Price complete outfit, \$12.50. Write for complete catalog of SHALER Vulcanizers.

To Dealers— Garages and Repair Shops

The Shaler is the only complete line of Vulcanizers made—recognized as "Standard" everywhere. It is the only Vulcanizer with **Automatic Heat Control**. More Shaler Vulcanizers are sold than of all other makes combined—and every Shaler is Guaranteed. Many dealers make \$15 to \$20 a day extra profit vulcanizing tires with Shaler Vulcanizers. Accessory and Hardware Dealers find them quick sellers that give perfect satisfaction. Every Garage and Repair Shop needs a Shaler Vulcanizer for its own use, and can increase its profits by selling them to motorists to use at home. The Vulcanizer is the only accessory not furnished as regular equipment, and every motorist needs one. Don't overlook this opportunity of increasing your profits. Send coupon now and get full information—with Special Dealer's Book—"Common Sense About Tire Repairs."

To Motorists—

You need a Shaler Vulcanizer not only for the saving in repair bills, but for its convenience in keeping your tires in perfect condition. If you stop the little hole you prevent the big blow-out, and possibly a serious accident. The Shaler soon pays for itself in saving repair bills alone, but it shows even a greater economy by giving much greater tire mileage.

All first-class dealers everywhere sell Shaler Vulcanizers. If yours does not, just mail us this coupon and we'll send you the name of a dealer who does, together with full information about Shaler Vulcanizers and our valuable book, "Care and Repair of Tires" that every motorist should read.

DEALERS COUPON

C. A. Shaler Co., Waupun, Wis.

Send me catalog, dealers terms and free book "Common Sense About Tire Repairs" (for dealers only)

Name _____
 Street _____
 City _____ State _____
 My business is _____
 Jobber's name _____



CAR OWNERS COUPON

C. A. Shaler Co., Waupun, Wis.

Send me your free book "Care and Repair of Tires" and catalog of Shaler Vulcanizers.

Name _____
 Street _____
 City _____ State _____
 Auto Supply Dealer _____
 Hardware Dealer _____

ford Notch. The return was made through Bethlehem, and then westward to Montpelier, Vt.

In Montpelier, Chief had friends. The home of these people affords a fine view of the Green Mountains, and the family has sleeping porches built like double-decked staterooms on a large veranda, facing the imposing ranges. Japanese latticed curtains can be drawn to keep out the morning sun. The arrangement was so novel that Chief drew a map of it, for he will build one similar in his country home when he puts up an al fresco dining room, also fashioned a little like the Vermonters' breakfast room. Ideas seemed to project themselves into focus at every turn of the journey, and the gypsies' eyes were not so preoccupied but they could see truths which looked at them from man-made products, as well as from birds and sunsets.

One night Chief said: "Poet, are you asleep?" and she replied: "No, son, but my soul is motoring in those far-off mystic star spheres."

"Oh, come, mother, apply the emergency — with gee-whiz juice at twenty-two cents!"

Taking the road again, and leaving the billowy fields with peaks on either side farther and farther behind, the gypsies went on toward Lake Champlain. Any automobilists who have rolled its length know the scenic pleasure of this jaunt. As Pelet had never been in Canada, the party went up through Rouse Point to old Fort Blunder, and then over to lunch on the Canadian side. By this time even Commissary, who had required considerable coaxing to leave the comforts of New York, loved the motor for itself alone. As all climbed into their "pod" and each "pea" sank comfortably into the spring seat which just "fitted," each gypsy, in luxurious ease, smiled at the others in the sheer, sensuous joy of restful motion. "The Lady," too, settled down to a steady hum which quietly sang of perfectly adjusted machinery. The afternoon was young and every incident harmonious.

The Enchanted Campers

THE crossing of the ferry at Chazy was a quaint little "curtain raiser," preparatory to the joyous comedy of camping by Lake Champlain. Long-fellow's kind of barefooted boy pulled up a white wood curtain which signaled to a raft in the mid-lake, and when it laboriously moved over to shore it took "The Lady" and her cargo right into its lap. The two little engines had a full load, but they kept chugging aloud: "We think we can do it!" "We think we can do it!" "We think we can do it!" and, sure

enough, they carried the motorists safely to the opposite shore!

How surprisingly the tiptop joys of a lifetime sometimes slip delicately up to one wholly unannounced! Such was the camping site on Lake Champlain. Chief nonchalantly led the gypsies down that glorified path into the forest.

It was an Eden of densest pine woods for them alone, set on a primeval lake. Cloud-capped mountains outlined the fainter skies up beyond some lands which were miles across the waters.

As twilight deepened, Commissary built a big watch

of glacial boulders, with a big, three-hundred-pound meteorite over the mantel.

Music, corn popping, dancing, clay modeling, original verse, and, finally, swimming, all find a place in the night's diversions.

How They Lived on the Cream of the Land

FROM Lake Champlain the journey was continued to Bennington, Vt., and down the Hudson, through the Catskills. The gypsies reached New York after thirty days. Their total expenditure was \$1.21 per day each, including hotel and all forage, and 20 cents each for expense of car. They lived on the cream of the land. Fruit, often at 40 to 60 cents a dozen, melons, ice cream, green corn, at 35 cents per dozen, and candy, will give some idea of what they had; yet these in abundance and occasional bills at the inns were covered by the investment of \$1.21 per person per day.

Anyone would have considered Chief a consummate "tight wad" about "The Lady's" gasoline, so closely did he watch her consumption of gas and oil every day, but her entire cost was only 20 cents per day for each of the party. Some persons may prefer to camp every night, but as it requires two hours of very active work to get a tent pitched and everything in order, and again two hours to repack one, it seemed advisable to the New Yorkers not to

camp, except for stops of two or more days. The inexpensiveness of this outing is such that families even in moderate circumstances can go. All that is necessary is to plan carefully to avoid waste.

The Effects of Ozone

THESE flitting witchfolk had only a four weeks' journey, yet it meant 1,300 miles of beautiful pictures.

A little rain, a few bad roads—yes, but such incidents were accepted as part of the "chance" which lent interest to a wholesome adventure. Physically the New Yorkers are brown as pine cones; mentally, they are rugged and wide awake to color and movement. Poet-Cook says they are more susceptible to fine spiritual impressions since roving, light as thistledown, in the splendid outdoors.

The Metropolitan gypsies, too, have become real comrades, drawn together by kindred desires and appreciations.

Each happy "best day yet" of the journey stands out to them as passionately fine because of cherished experiences, wonderful scenery, madcap pranks in camp, delightful motor runs, and plenty of God-given ozone.



The happy life. How surprisingly the tiptop joys of a lifetime sometimes slip delicately up to one wholly unannounced

fire, and the khaki-clad group sang wild Russian airs around it, even trying to dance some Marsovian steps. Then they wrapped themselves in blankets and stretched out before the blaze. It was poetic to watch the dancing pine flames flirt with the harvest moon and entice her beams over the waters to their very embers.

Next day the crew went out in a boat with a real honest-to-goodness fisherman. As he paddled along ahead of the wind, Chief asked: "About how fast are we going?" The Champlain seer viewed the heavens and the lake, then, shifting his weed, slowly ejaculated: "Wall, I should say we be goin' pretty good hickory, pretty good hickory!" This seasonable phrase so caught the fancy of the gypsies that many a time later, as they went cruising down mountainsides, through forests of spruce and pine, some one would sing out: "We be goin' pretty good hickory, pretty good hickory, Chief!"

As camp was only a mile from a large creamery, cream 60 per cent fat, delicious buttermilk, and milk (always ordered one-third cream throughout the trip) added to the supplies. Poet-Cook felt that the occasion of Lake Champlain demanded Lucullan banquets, so she concocted dishes which would place a "Spitz-Charlton" in the second row of famous restaurants.

Ticonderoga

CHIEF and Commissary worked like master mechanics to build a dining table, bench, chairs, cupboards, dressing tables, and washstands. They cut a forty-foot slender pine to furl a ten-cent flag! An incandescent bulb which was found upon the beach, probably jettisoned from some passing yacht, was carefully suspended by Chief above the dining table, its humor causing a smile.

So complete was "Camp Champlain," with its "Broadway," "Fifth Avenue," and "Wall Street" features, that the gypsies never would have been content to leave it at the end of one week, if a hurricane had not come along on Thursday and breezily bidden them "pack and be off."

As they were not due at a professor's camp near Orwell, Vt., also on Lake Champlain, until Saturday, they took to the road again and stopped for the night at a farmhouse near Ticonderoga. Here they met some fellow travelers who were going to explore Ticonderoga fort thoroughly. The militant spirits looked their disdain at peace-loving Poet-Cook, who said she would enjoy having one free day to sew a little, gather some poppy seeds, and wander about with nothing special planned.

The Professor at the Supper Table

SUNDAY in the professor's camp was novel. The place is called the "Singing Cedars." He and his children, with their children, have bungalows fringing a grove of a thousand cedars. The cabins stand on rocky points, facing the Adirondacks and overlooking a mile and a half of Champlain beauty. In the evenings all gather in his big living room before the massive fireplace, which weighs fifty tons. It is



Showing how the tent was fastened to the running board and how "The Lady" looked in repose on her journey



This is Ausable Chasm in New York State. These gypsies carried a good camera and traveled in beautiful country

Race victories live forever in your National Car. Racing with us is a means, not an end. It proves our quality. It is your positive guarantee of sureness, reliability, perfect materials and unconquerable power and speed. The National is the world's greatest winner in all kinds of contests.



Holds international 500-mile race record, 81.72 miles per hour actual running time. Holds World's Stock Championship, 305.03 miles without a tire change. Holds world's record for fastest mile with stock car, time 40.32 seconds. And a long list of unequalled phenomenal performances.

Let the builders of the World's Champion make your new car

A CAR can be no better than its source. The National Company is financially solid—enjoys year-round manufacturing efficiency—is service-liberal—gives more real car for the money and takes pride in quality. Fourteen years experience guarantees your car.

Four and five-passenger

Six—\$2375



To see this new car is to desire it—to ride in it once is to determine to possess it

National

"You don't have to raise the hood"

NATIONAL owners have learned that we build whole cars—the name *National* is their guarantee. Every *National* car is built as a unit—every mechanical part operates harmoniously to produce satisfactory results. You leave the responsibility for its mechanical construction to our experience—forget that there are gears and mechanical parts in the car. Just rest in comfort and enjoy your ride with absolute confidence in your car.

You can buy over telephone

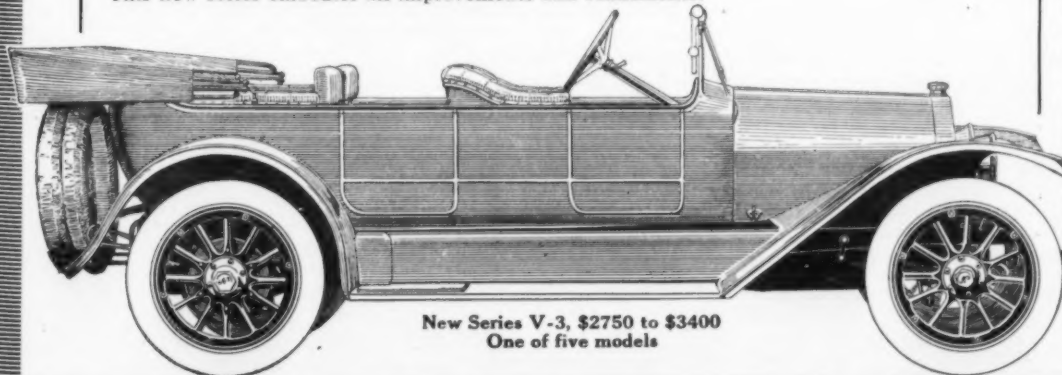
NATIONAL owners buy performance and not specifications—they can buy their new *Nationals* over the telephone. We sell our experience, ability, responsibility and our guar-

antee—not a mere job of assembled wheels, axles, gears and parts. That's why you don't have to raise the hood to buy a *National*, you know no better is made.

Lavish in comfort

THIS new *National* embodies all our internationally recognized principles of superiority. Beautiful, economical, efficient and lavish in comfort—this car is the climax of the *National's* success in car building since its pioneer beginning. It marks a most coveted improvement in motor car designing. It is the one car that harmonizes from end to end—a symmetrical creation that is distinctive and essentially practical.

The *National 40*, with its marvelous history, needs no introduction. This is our staple car—the highest achievement in automobile building. Here is the best all-around motor car ever made. This is the third year for this successful car, in all of its essential features. This new series embodies all improvements and refinements.



New Series V-3, \$2750 to \$3400
One of five models

First to improve European styles

Other makers have imitated the styles originated in Europe—but the *National* improves these advanced foreign designs. Nothing obstructs or spoils the continuous beauty of the long body lines. Both sides gradually converge toward the narrowed radiator, giving the whole car an original appearance and a "pointed" style. Smart slope from cowl to radiator.

Brief specifications—National Six

Motor, six-cylinder, $3\frac{1}{4} \times 5\frac{1}{2}$ -inch, cast en bloc. Tire pump, integral part of motor. Clutch, self-contained aluminum cone. Starting and lighting, electric two unit system. Transmission, sliding gear selective type, three speeds forward, one reverse. Gauge 56 inches. Oiling, crank case constant level, force feed, with gear driven pump. Ignition, high tension, dual magneto with storage battery. Tires, $36 \times 4\frac{1}{2}$. Firestone demountable rims. Air pressure gasoline feed, generated by small pump in crank case. Capacity 23 gallons. Automatic carburetor. Two sets of brakes on 16 inch rear wheel drums. Bevel gear drive through straight line shaft with universal joints and torsion member. Full floating rear axle. Left side drive. Access all four wide doors. Single lever in center controls all speeds. Half elliptic springs, front, special *National* construction, rear.

Equipment:—Top complete with side curtains and boot, ventilating rain vision wind shield, extra Firestone rim, electric lighting and starting systems, 12-inch double bulb electric headlights, electric license tail light, Warner speedometer, electric horn, tools and jack.

Send this coupon today

Gentlemen:—Without obligation on my part send me complete particulars of National cars.

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Indianapolis, Indiana, U. S. A.

Keeping Down the Tire Cost of Living

WHEN the motorist complains of the high cost of his pastime and, on further interrogation, says it is chiefly due to "those blamed tires," you may feel reasonably sure that it is chiefly due to himself. Not that automobile tires are inexpensive or that they approach to perfection. It may, perhaps, be said fairly that they have not quite kept pace with the development of the rest of the mechanism of which they are among the most essential parts. But they are surprisingly good, nevertheless, and give highly satisfactory and economical service—if they get a "square deal." It is of this "square deal" or, in other words, of the proper treatment of tires for good results, that I propose to speak here. By way of preamble; it is well to remember that tires deserve good treatment because of the tremendous task they are called upon to perform. One painstaking motorist decided not long ago to do a little arithmetic and thus discover what risks his tires had actually run. This man had toured 7,000 miles in Europe and 13,500 miles at home. By doing a bit of multiplication in which the size of his wheels was involved he found that his four "shoes" had accepted 10,500,000 chances of blow-outs.

Don't Underinflate

TIRES earn consideration: which is by no means to say that they receive it. If you would give it to them and thus stretch out your miles of happy riding, and at the same time keep down the tire bill, there are a number of essentials which you must not forget. Most important of these, perhaps, is do not underinflate. Many makers, as the experienced motorist knows, stamp on their tires the air pressure which should be maintained in them. Those who do not do this will gladly furnish the information. It is no more than common fairness to follow this instruction. If you bought a watch you would not expect it to keep satisfactory time without sufficient winding or when it was wound too much. Why expect an automobile tire, made to run under certain definite pressure, carrying a given weight, to give satisfactory mileage if the pressure is not there?

The damage done by underinflation is chiefly in the separation and weakening of the layers of fabric and rubber of which the tire is built up. No tire is intended to carry of itself the weight of a car. It is the cushion of air that does the carrying. When this cushion is of insufficient density the walls of the tire must bear some of the load for which they are not intended. In running they flatten out beyond the normal at the point of contact with the ground. Thus they are bent back and forth laterally, treatment resulting in the pulling apart of the fabric and the formation of a ridge on the inner surface of the tire side. After a bit more running this ridge becomes a crack and a blow-out is the logical consequence. Unwarranted strain, resulting in friction, heat, and wear, has ruined the casing. The fabric layers, instead of acting in unison, have helped to destroy each other. In addition to this lateral wear, underinflation also causes a ridge or lump to form across the "tread" or wearing surface just ahead of the point of contact, when the car is in motion. This little roll may even be seen if the car is pushed along slowly when its tires are soft. Driving when this condition is present obviously causes unnatural bending and disintegration of the fabric. The tire is being subjected to both frontal and flank attacks for which it is not prepared. "Rim cutting" is another of the costly results.

The Right Pressure

TO GUARD against underinflation be vigilant in regard to pressure. Own a pressure gauge. A good one may be had at a slight cost. Do not be too sparing in its use. Twice a week is not a bit too often to test your pressures, and it is a wise precaution to do so after any long run. No tire will maintain its pressure indefinitely even if there have been no

By Ransom Burnett



punctures or obvious troubles. Twenty pounds to the inch of breadth is a safe estimate of proper pressure. On this basis, here are the pressures for tires of various sizes: 2½ inches, 50 pounds; 3 inches, 60 pounds; 3½ inches, 70 pounds; 4 inches, 80 pounds; 4½ inches, 90 pounds; 5 inches, 100 pounds; 5½ inches, 110 pounds; 6 inches, 120 pounds.

Don't Overload

OVERLOADING is akin to underinflation. Therefore, do not overload. But overloading has certain evil effects which even the lack of sufficient air pressure does not show. If it is severe it will cause the destruction of the elasticity in the rubber itself. This is especially true of solid and cushion tires, such as are widely used on motor trucks. The action is like that of stretching a rubber band too far. Up to a certain point the band will spring back to its normal size when released; beyond that point the snap and vigor will have gone out of it; its resiliency will be lost. So it is with the tire. Under a load which it is fitted to bear it will retain its springy quality after many miles of use. But if it has once been crushed beyond its capacity the days of its service are numbered. Many tire users know that overloading is destructive, but they have in mind continual or habitual overloading. They are ready to take a chance for, say, one emergency delivery, not realizing that, with solid tires, at any rate, the damage is done by one trip under an excessive load. The following is a table of some popular tire sizes with the weights which they should carry, allowance being made for a normal number of passengers:

Tire size	Front weight	Rear weight
28 x 3 in.	350 lb.	425 lb.
32 x 3 "	375 "	450 "
30 x 3 "	375 "	450 "
30 x 4 "	625 "	750 "
31 x 4 "	635 "	775 "
32 x 4 "	650 "	800 "
42 x 4 "	900 "	1,050 "
34 x 5 "	950 "	1,200 "
43 x 5 "	1,400 "	1,550 "

For solid tires, used both single and dual—two to a wheel—on trucks, here are some weights which should be considered the maximum:

Tire size	Weight single	Weight dual
30 x 2½ to 42 x 2½ in.	650 lb.	1,400 lb.
30 x 3 to 42 x 3 "	950 "	2,500 "
30 x 3½ to 36 x 3½ "	1,375 "	3,500 "
30 x 4 to 42 x 4 "	1,750 "	5,000 "
34 x 5 to 42 x 5 "	2,000 "	6,000 "
36 x 6 to 42 x 6 "	3,000 "	8,000 "
36 x 7 to 42 x 7 "	4,000 "	10,000 "

To determine the weight which a car is carrying scales and not guesswork should be employed. The whole car should first be weighed. Then, by running first the front half and then the back half on the scales and noting the differences from the total, a close approximation of the front and rear weights may be obtained. One of the signs of overloading in pneumatic tires is the appearance of odd-looking, zigzag breaks in the fabric all round the tire.

One of the important causes of tire ills is lack of alignment of the wheels. Either the front or the back wheels are frequently out of alignment, considered as a pair, or the two pairs with each other. Not infrequently both conditions exist. The result is excessive wear of the tread of one or more wheels, the worn line often running more or less off the parallel. The fault can be corrected by adjusting the faulty alignment, which may be due to a number of things

such as a bent axle, a loose steering knuckle, or steering rods that are too short or too long. In determining the alignment careful measurements should be taken of the

distances between the wheels at a point on the rim farthest from the axle and on a level with it. Alignment of the front with the rear wheels can be determined by first pointing the front wheels as if to go straight ahead and then laying a stiff rod against both the wheels at one side so that it touches each at two points. If there is a space at one of the points of contact the wheels are out of alignment.

The Driver's Part

TIRE troubles not unlike those due to lack of wheel alignment are due to unequal brakes. The brakes on each side should exert a force as nearly equal as possible. If they do not, one rear wheel will get most of the wear and tear in braking. Adjustment of the brake bands is the remedy for this rather frequent condition. A word here as to the manner of braking. It is all too common to see a car whirl up to the door and slide to a stop with a rattle of gravel or a cloud of dust after a sudden application of the brakes. Slides like this are death to tires.

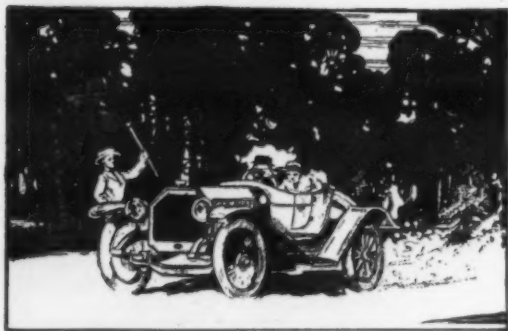
Nowhere has the old saw about an ounce of prevention greater force than in tire care. Just a little attention will save a host of trouble in the end. Small cuts in the casing, hardly apparent to the careless eye, will grow rapidly, owing to the expansion of the rubber, and will rapidly accumulate sand, dirt, little stones, and other foreign matter which will work its way further and further in and between the layers of fabric, leading to sand blisters, wider tears, and blow-outs. The application of one of the many good plastic preparations for tire surgery will nip this kind of trouble in the bud. Before the repair gum is applied the cut should be cleaned out with gasoline. Worse than the sand and grit even is the moisture which it carries to the fabric through small cuts and tears. Mildew and rot will inevitably attack the cotton of the tires if attention is not given to these insignificant injuries at the start. More serious cuts require prompt vulcanizing.

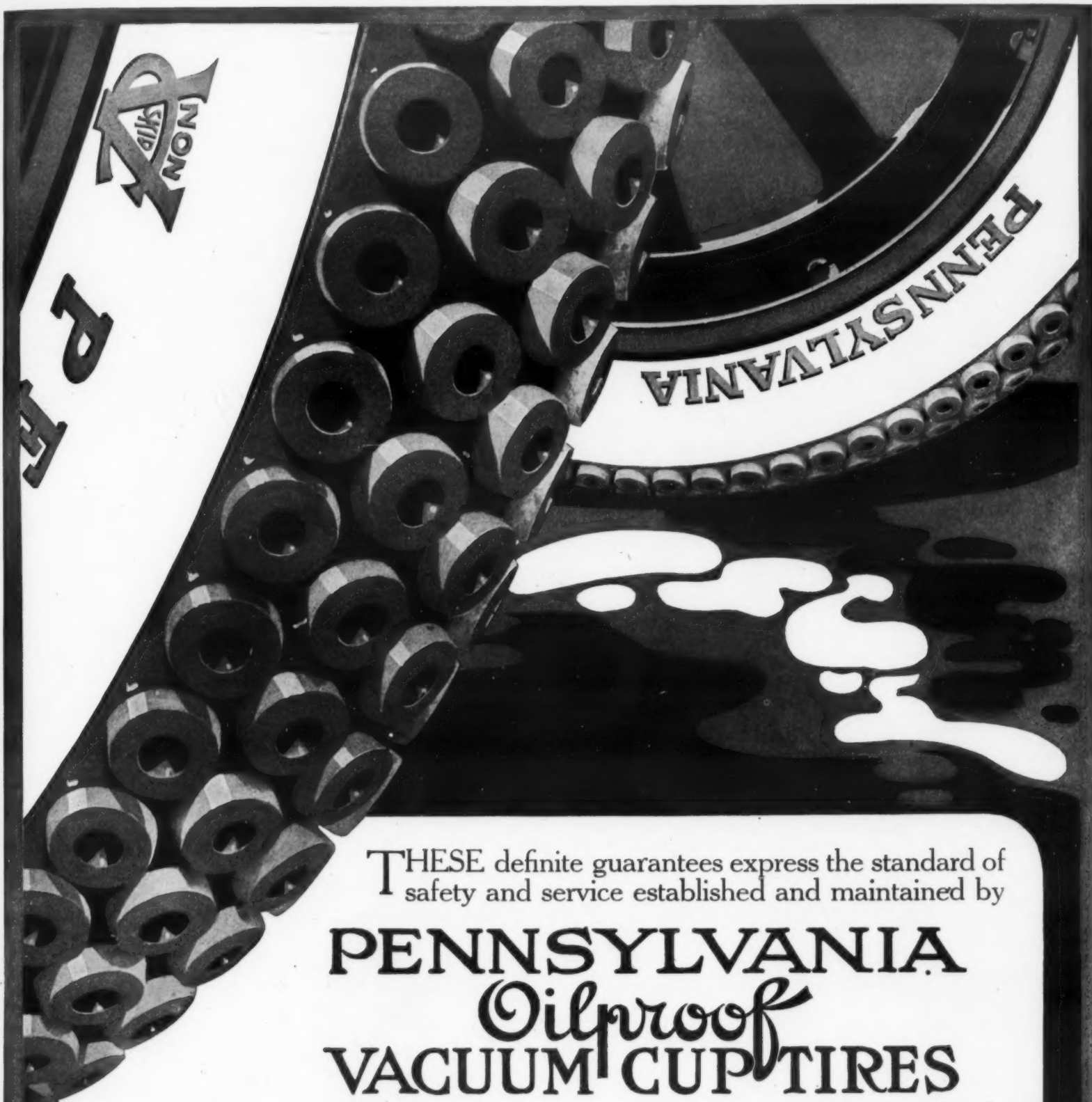
Oil and grease have an exceedingly injurious effect on rubber. Therefore do not let your tires stand in oily places or fail to wipe off such oil as may get on them from the brake drum or gear case.

Care in driving has much to do with tire life. I have already referred to the practice of too spectacular braking. Too sudden starting is almost as bad. When the power is furnished too rapidly the rear wheels lose traction and spin, getting more wear in a few moments than they would get in hours of ordinary running. Keep out of car tracks and ruts as much as possible. If you are forced to drive in them and the side walls of the tires are worn in consequence it is often possible and advisable to reverse the tire on the wheel and turn the worn side toward the car. If one desires to do this with a tire fitted with a cemented flap, the flap, naturally, must be reversed also. The side walls of tires are not designed for friction; they are not fitted for contact when running, and many a costly casing has been ruined by neglect of this point. Curbstones are frequently the direct cause of trouble of this nature. When Milady goes calling or visits the shops she wants to stop as close to the curb as possible. Her chauffeur knows this and, also, he likes to show what a "snappy" driver he is. It is not hard to imagine the scraping the side walls of those tires get both in reaching this position and in moving away again.

Bugaboos No Longer

AS A final suggestion to keep down tire cost, use good tires, good tubes, and have your tires, if anything, a bit oversize. Then take the rather simple precautions which have been indicated, and the "blamed tires" will cease to be the bugaboo they have been, perhaps, in the past.





THESE definite guarantees express the standard of safety and service established and maintained by

PENNSYLVANIA Oilproof VACUUM CUP TIRES

Guaranteed not to skid on wet or greasy pavements, or returnable at full purchase price after reasonable trial period.

Guaranteed against all deterioration due to the action of oil, wherever encountered.

Guaranteed to give 4,500 *actual* miles of service, under liberal and definite conditions printed on tag accompanying each casing.

The unusual qualities and features that have evolved and confirmed these guarantees through long and diversified actual use, have brought Vacuum Cup Tires to the head of the line. After experiencing Vacuum Cup economy and safety no motorist is ever satisfied with lesser service.

On heavy, powerful automobiles the service and safety of Vacuum Cup Tires have become imperative—and this, too, emphasizes their superiority for cars of less severe requirements.

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Motor Racing Men

Lights on the Personalities of Some of Our So-Called "Dare-Devs"

By Ralph De Palma

IN ONE of the big road races not so long ago, a well-known "stardriver,"

who had fallen back close to last place, stopped at his pit and asked his manager: "What's my position in the race?"

And the manager curtly replied: "Very embarrassing!"

Just so, it is very embarrassing for me to write this article about racing drivers—to try and produce something readable without making remarks that will offend some of those I have beaten and who have beaten me in races.

Popular opinion seems to be that the driver of a racing automobile is a wild-eyed dare-devil who tries to see how reckless he can be when handling a car in races. He is supposed to throw all caution to the winds, to skid around turns on two wheels with the throttle wide open, and, in short, is believed to be a decidedly crazy, foolhardy semimaniac.

This is not so. In spite of what newspaper writers and authors of fiction have had to say on the subject—in spite of all the alleged interviews and wildly sensational descriptions of rides with "speed kings," the modern racing driver is not a maniac. He does not try to see how recklessly he can pilot his mount. On the contrary, he drives with great care and judgment. He has something more to think about than simply tearing top speed out of his car. He has to use his head; has to watch his pit signals; has to watch how the tires on his side of the car are standing up; has to do problems in mental arithmetic while going at a 90-mile-an-hour clip and do plenty of other things. When he skids it is unintentional on his part. It is not done to show off.

When automobile racing first came into vogue, I was a bicycle rider. It was quite thrilling in those days to watch Barney Oldfield, Louis Chevrolet, Webb Jay, and others go tearing around dusty tracks. That same speed to-day, however, would seem tame indeed. After I quit cycling, I became a motorcycle rider. Sometimes winning and sometimes losing, I acquired "head-work" and track generalship in both of these games. The knowledge stood me in good stead, too, for a number of times in an automobile race I have outdriven a pilot who had a faster car than mine, simply by matching my judgment against his. For some years, on tracks and off, I have had an opportunity to study at first hand not only racing, but the sort of men doing it. By watching them in action I have been able to discover the good and bad points of some of the speed boys.

The 500-mile race at Indianapolis was the feature event of 1913, and it introduced to this country a new pilot of marked ability—Jules Goux.

His amazing self-confidence caused comment on all sides. The night before the race, in a barber shop, he was asked whom he picked as the winner.



He was reported to have replied that he expected to win, because in his opinion there were no drivers here who were "any good."

His unkind remark reached the ears of some of the American drivers and next day they tried to get Goux's scalp. The Frenchman, however, had the laugh on them at that. Although I was a competitor in the race, I had a "hunch" that Goux would win, and other drivers had the same premonition. It was uncanny. And Goux went back to France with some 30,000 American dollars as a reward for his work. An interesting point to note was that Goux's car probably could not have run ten laps more, after finishing. Its front axle had cracked.

Spencer Wishart, who scored second to Goux in the last 500-mile race, and who has won many track events, is a great little driver. This season he was a mate of mine on the Mercer team. Spencer began to drive in races when he was only sixteen years old, piloting his own cars. At that time everyone thought he was older. Now he drives professionally. This boy, although "raised a pet—tender-like," as they say—will take an awful lot of punishment in a race and will drive hard and fight to the last ditch in an effort to win or score a place even when the odds are all against him. In the last Vanderbilt Cup race, he broke his rear shock absorbers. The course was rough, and for much of the race the frame would keep slamming down on the axles, causing the most agonizing jolts. But Spencer stuck it out and refused to quit. His mount was a duplicate of my car with which I had won at Elgin, and Spencer was mighty anxious to beat me. He and Hughie Hughes gave me a good chase and I won

only after a hard fight. Hughes scored second and Wishart third.

In the Fairmount Park

race three years ago, Wishart should have won his class in the sweepstakes—the 600-cubic inch class race.

He really beat Mulford, who was declared the winner in this contest, but "Spence" bumped his mechanic out of his car rounding a turn—without knowing it—and kept on going.

At the pits he secured a new mechanic, but was nevertheless disqualified on a technicality. The game is full of close shaves. Ralph Mulford, who has won a Vanderbilt Cup and twenty-four-hour races and numerous other track events, and who is unquestionably one of the cleverest, headiest pilots, has had some narrow escapes in races, although he has never experienced a bad smash up. He is knocking on wood. In one of the Elgin road races he became so exhausted from the heat that he collapsed at the wheel, and his mechanic, "Bill" Chandler, was permitted to finish the race as a substitute. Under Chandler's guidance the car was driven to a place. On another occasion, at Tacoma, Wash., Mulford was stunned by a stone thrown up by a competitor's car. The stone struck Ralph a hard blow on the forehead. Again his mechanic, Chandler, was forced to finish the race instead of Mulford. That, by the way, is how Chandler became a driver.

People have often commented on Mulford's driving costume. He always wears a high starched linen collar and a necktie. Most of us drivers want our necks free and unhampered, and a linen collar certainly would chafe the majority of necks considerably. But the smiling Mulford seems to be comfortable in this attire. He loves chocolate eclairs and sometimes during a race when his throat is full of dust, he finds relief in eating gumdrops. "My middle name is 'Ride'!" Mulford tells his friends. I tell him that his first name is lucky.

The late Lewis Strang used to want champagne when he pulled up at his pit for a tire change. That was before alcoholic liquors were forbidden in the pits. Strang never drank enough champagne during a race to have it affect him, but the rule barring liquor was a wise one to promulgate, for there have been numerous cases of drivers taking a hooker or two of whisky "to get up nerve" for a race. Sometimes these fellows have torn down fences.

To travel a mile in 25 2-5 seconds is quite a feat. That is what Bob Burman did three years ago. I shall always be sorry that I never had an opportunity to drive the 200-horsepower "Blitzen Benz"—the car with which Burman did the trick. I believe Burman's marks for the beach straightaway will stand for some time to come.

Some time ago I was with a couple of drivers at luncheon when the subject of how we all broke into the game was brought up. George Robertson became a racing driver by accident—through not waking early enough on a certain morning. It seems that arrangements had been practically completed for George to accompany a well-known theatrical manager on a European pleasure trip that was to last nearly a year. The manager wanted an expert driver and knew George personally. Robertson was to be ready to sail at the designated time, but the night before the sailing



Jules Goux



Louis Disbrow



Armour Ferguson



Caleb Bragg



Ralph Mulford



Bob Burman



Joe Dawson



Teddy Tetzlaff

As sure as the Whirl of the World



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SO rugged and powerful that it will spin a big six-cylinder automobile engine faster than 100 revolutions per minute with the ease of a Hercules and on less than 100 amperes of current, the Auto-Lite Starting motor can be relied upon to perform its function faithfully and fully—compelling positive starting day in and day out, winter or summer.

Strong—compact—*capable*—fully enclosed—protected from the deteriorating effect of water, dirt and grease, it is built for hard, continuous service and should last longer than the car to which it is attached.

Look for this efficient starter on your 1914 car.

The manufacturing and financial facilities of the Electric Auto-Lite Company are adequate to handle contracts of any size, not only for starters but for complete electric lighting and ignition systems as well.

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While the complete Auto-Lite electric lighting system may be attached easily to the average car, it is more difficult to install a starting motor because space and structural limitations sometimes necessitate material alterations and considerable machine work before a satisfactory application can be made—hence orders from individual owners for *starting motors* are not solicited.

You *can* have the complete Auto-Lite equipment on your new car however.

Manufacturers can furnish it if you so specify.

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"The Pioneer Makers of the 6-Volt Electric System"

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Every Motorist should have a copy of the Auto-Lite Handbook on Automobile Electric Systems.

Explains in detail, functions of the various parts—how to locate and remedy troubles of all kinds—embraces all electrical automobile systems. The large operation chart which it contains is alone worth the price. Regular price 50c.

Will be sent to you for 20c in stamps if you use the coupon.

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Enclosed find 10c in stamps for which please send me your handbook.

NAME.....

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date he went to a party and in the morning he awoke too late to accept the position. Some days later George was offered a mount in a Vanderbilt Cup race. Within a short time he had numerous victories to his credit, among them the 1908 Vanderbilt Cup. Had he gone to Europe he probably never would have raced.

I broke into the automobile racing game by accident. It happened that I was riding as mechanic on Campbell's car in the Briarcliff road race in April, 1907. In practice the car upset, and poor Campbell was laid up. I begged for the mount in the race and the entrant let me have it. It was a great day for me, although I did not win. I did not realize, though, that it was my start on a career in which I was destined to win more than 200 automobile races. One of the most amusing things I ever read in print was that little human interest sketch which Mr. Arthur Ruhl wrote about me last year in *COLLIER'S*, mentioning this point, for it carried me back to the days when I used to long to be a race driver.

Armour Ferguson is one of the youngest racing drivers and pilots cars for his own amusement. He has some amusing little tricks. Last summer he bought the car which the late Zuccarelli drove in the last Indianapolis 500-mile race. A few days after purchasing it, Ferguson took the car to Galveston, Tex., for the beach meet there. Many of the racing men laughed at him, a mere "kid," toying with this big car—one of the fastest ever built. Armour fooled them by winning a couple of races. He has a way of buying chewing gum in quantity. He chews each piece about five minutes, just long enough to get some flavor out of it, then discards it and tries a new piece. He has a most ferocious habit of sending telegrams to friends. Armour hates to write letters.

While at Galveston he wired so frequently to his family and friends that his telegraph bill amounted to more than \$100 for the one week he was in that city. Ferguson is also a lemonade fiend. He never touches alcoholic liquors, but he is wild about lemonade. He is said to be one of the hardest persons in the world to awaken from slumber and even on the morning of big races his manager used to have to beat him over the head with a wet towel, throw shoes at him, yank him out of bed, and try other "stunts" to get him on his feet. Unlike the majority of drivers he is naturally highly nervous—especially so just before a race, but once started he drives coolly and well.

Superstitions and Mascots

SOME of the benzine jockeys are quite superstitious. Personally I am not superstitious, and I know that a number of the boys who pretend to believe in signs really take no stock in them when it comes right down to business. Louis Disbrow who has been breaking numerous world's records with his Simplex "Zip," used to send to a friend in Florida for a bone from a raccoon's foot when preparing for a big race. This bone was supposed to be lucky, and Louis would nail it to the dashboard of his car, and after the race return it to its owner. Louis apparently lost faith in it, for now his team has a little pig for a mascot.

When the National Company maintained a racing team a few seasons ago they had a bottle-fed pig for a mascot. Len Zengle was driving on the team that year, and the boys twisted the pig's name into "Zen Lengle." The animal used to wear a little indigo-colored jacket to match up with the sweaters worn by the drivers. On its back was the name of the team, and over its tiny eyes it frequently wore a pair of goggles. It was a cranky little pet, too.



Erwin Bergdoll



George Robertson

Teddy Tetzlaff, the California boy, who is unquestionably one of the most sensational drivers, and whose policy in a race is to slam ahead at top speed from the word "go" and take a chance on his car standing up, is superstitious at times. A couple of years ago he drew number twenty-three in the Santa Monica, Cal., road race. This number worried him, for he considered it a "jinx." Before the start of the race he went to Starter Wagner and asked to have his number changed. "I'm leery about that number twenty-three," he

declared. "In the Los-Angeles-Phoenix race I met with my smash-up at just twenty-three minutes past eleven o'clock. Now they have given me that darn number twenty-three again, and there are eleven cars in the race. Wag, I do not want to start with that number, and my wife is nervous about it, too." Teddy was serious, and, after talking the matter over for a few minutes, the officials consented to let Teddy reverse the number on his radiator and run with number thirty-two instead. "Terrible Teddy" was mighty grateful to the officials for the change, for he won the big race that day. What's in a number was more important to him than what's in a name.

Tetzlaff is remarkable in more ways than one. He is as strong as a young ox, heavily built, able to take plenty of punishment—and he does. While in practice for the Vanderbilt and Grand Prize races a year ago, Tetzlaff was struck in the eye by a stone kicked up by another car, and one of the lenses of his goggles was broken and slivers of glass driven into his eye. He drew up at his pit when he reached it in the next round. There were three bits of glass driven right into the eyeball. In the absence of a physician a couple of newspaper men looked into his eye and with a penknife one of them removed the three slivers of glass. Teddy bathed his eye and was driving in the race the next day. Automobile racing is no pastime for a mollycoddle.

Rough Luck and Close Calls

I CAN recall how, driving the famous old "Cyclone" in the Wilkes-Barre hill climb, I struck the "Devil's Elbow" bump so hard that the car jumped in the air and when it came down the jar snapped off one of my back teeth. I began to believe my teeth were made of china. Disbrow lost a tooth in a Vanderbilt Cup race on Long Island. Only his, it is said, was capped with a gold crown and set with a small ruby; mine was not.

A close call for "Caley" Bragg took place at Brighton Beach three years ago. Caley who is a great little driver, was driving a ninety-horsepower racer which was quite heavy. Pulling into the stretch on the first lap of a five-mile event, his car skidded around at right angles and shot squarely through the infield fence—right between two fence posts. Caley applied the brakes, but the car was going with such force that they had no appreciable effect. He knocked over an oil barrel and the first thing he knew his car had swerved around and plunged through the fence again right between two other posts and out onto the track. It all happened in less than a second, so, without further attempting to stop, he kept right on going and had the fun of catching the other fellows and winning that race.

The spectators thought it was clever maneuvering on Caley's part, but the driver declares it was all pure luck that the car swung back to the course as it did.

On the same track last summer Jack Le Cain's car sideswiped into mine and tore some of the wire spokes out of my left rear wheel. It was a close call for me, but I did not realize that the wheel was broken until after the race was over.

One of the worst cases of rough luck in a race occurred in the Elgin contest of 1912. Erwin Bergdoll was giving me a good battle for leadership toward the end of the contest. Bergdoll blew a rear shoe on the back stretch and continued to drive at high speed to his pit on the flat tire. The friction was so terrific that when the car stopped the fabric and rubber were seen to be burning—actually in flames. It required about five minutes to remove and replace the hot rim and Bergdoll's chances of beating me were lost.

Our Ambitions

THE late David Bruce-Brown was one of the greatest drivers who ever gripped a steering wheel. Twice he won the International Grand Prize race at Savannah. His untimely death at Milwaukee a year ago was a blow to the racing fraternity. Dave was a most lovable fellow and was admired by all of the drivers. Dave had a way of doing some of the most original stunts. For instance, just before the 1911 Grand Prize race he made a lopsided wager with me. The winner was to treat the loser to a trip to Europe. Dave won and the following season he made good his wager by taking myself and Mrs. De Palma abroad for an extended tour.

There is one driver who has been plugging along for several years without winning anything big until last season. That is "Gil" Anderson. He had a victory coming to him after his many disappointments

and almost-wins, and last August at Elgin, Ill., in a Stutz, he won the Elgin National Trophy race. The day before on the same course I won the Chicago Automobile Trophy with my Mercer. If a man sticks at racing long enough, no matter how clever he may be, he must expect a bad accident. "He has it coming to him," as we say.

None of us really intend to stick to racing as a sport or profession permanently. Most of us either want to win a big race or clean up a neat pile of money and quit. But the trouble is that we want to drive "just one more race" before retiring, and after that we want another. Frequently drivers announce their retirement from the game and six months later they are offered a mount for a speed event and accept it.

In this respect Barney Oldfield is quite remarkable. He began driving before any of the present day stars were heard of and he has retired from the game about as often as Bernhardt has made her "farewell tour." Yet he always "comes back" and Barney has had plenty of accidents, too. He seems to have more lives than a cat.

Some years ago it was the lure of the excitement in a race and the glory which went to the victor that attracted the majority of the old racing pilots to the tracks and speedways. Within recent years, however, things have changed. Now it is the cash that the young man who enters the racing field is in search of, although naturally he likes the glory of a victory. A race like the 500-mile contest at the Indianapolis Motor Speedway results in bringing more recruits toward the racing game than any other event. Months in advance of this classic, I receive letters from ambitious youths who believe that they were cut out for race drivers, some of them from very remote sections of the country. They ask me for advice on how to go at it and even inclose a two-cent stamp for a reply. I sympathize with these youngsters. I know what the feeling is, for I had it many months before I broke into racing.

With the supply of experienced pilots far greater than the demand, these youthful aspirants have very little chance, and it is a good thing too; for the majority of them are quite unfitted for speed driving.

The Lure

IT IS the \$50,000 in prize money offered at Indianapolis that has the effect on these embryonic "race nuts." To win one of these races means the taking down of a prize of \$25,000, about double the annual salary of many a bank president, and there are thousands of youngsters eager to get a chance at that amount. Until Goux, Guyot, Pilette, and the late Zuccarelli came over to compete, foreign pilots had an idea that \$50,000 in prizes for one race was a myth. When I was in France for the 1912 Grand Prix, one of the drivers told me he understood it was necessary to kill several spectators or some of the other drivers in order to secure a large prize in America.

With the reports that Goux has circulated since his return to Europe, it is now quite likely that there will be a swarm of foreigners seen in action in this country the coming season. The American boys will welcome them too.



"Gil" Anderson

"Why don't you quit, Ralph, and go into business?" one of my best friends asked me lately. "Because," I replied, "I simply *have* to race. I like the game and I don't want to give it up. It is not for money alone that I stick at it. I simply 'love my profession,' as the actors say. Now you would not listen to some one coming along and asking you to give up your profession. Well, it is just so with me. Driving is my business and my hobby, and I have got to drive my hobby."

One of these days I suppose I shall quit the game and indulge in less sensational athletic sports. Then when I want to return to the thrills of the racing game I shall call a taxi at 7.45 p. m., and go from 110th Street and Broadway to the theatre district.

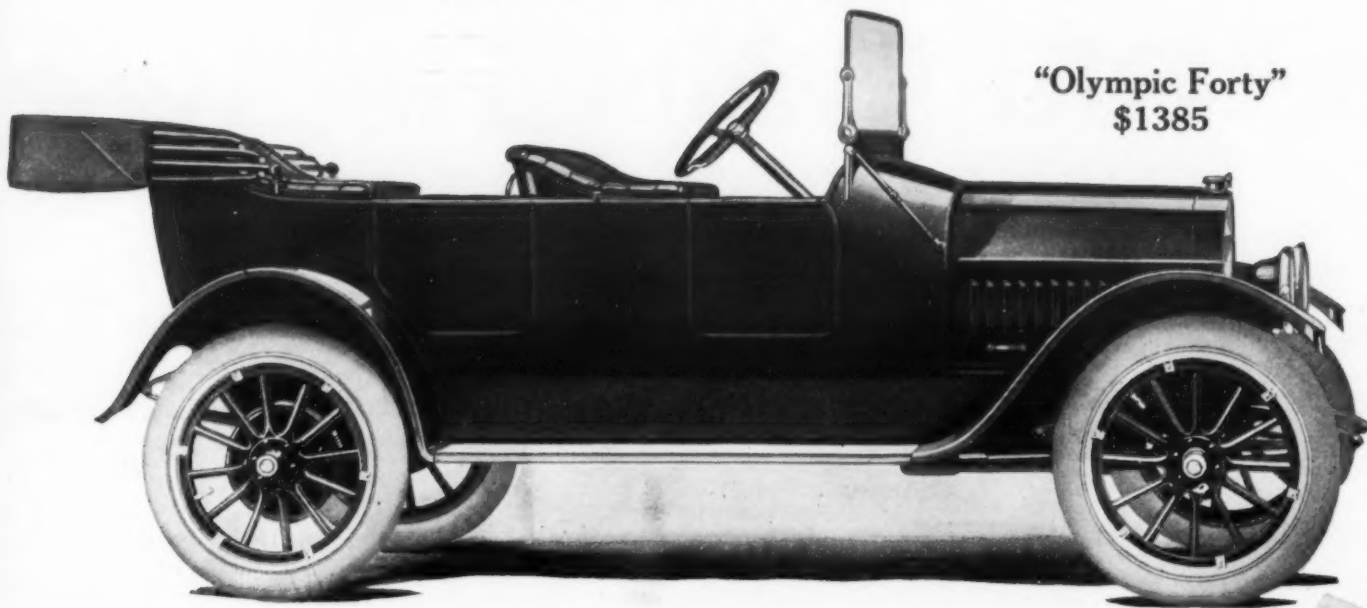
I shall do the timing and watch the pit signals and the taxi expert shall do the driving.



Spencer Wishart



Hughie Hughes



"Olympic Forty"
\$1385

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EVERY automobile is a reflection of the character and ideals of the men who design it, the executives who manufacture it, the mechanics who construct it and the dealers who sell it.

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After all is said and done—the difference between a good motor car and a poor one is the difference in the men *back* of the car. The executives, the designers, the machinists, the upholsterers, the painters—those who actually create the cars.

The Jackson Organization—the men behind Jackson cars—build into them, eleven years of experience and knowledge; all of it gained in improving and refining Jackson cars. That is one of the big reasons for Jackson success—the men who are building Jackson cars today are the same men who started building Jackson cars when the modern automobile was in its infancy. They take a pride in the product of this Organization. They feel a keen responsibility in its performance when it reaches the owner's hands. They give it the best that is in them—good intent and high ideals.

And so, when you buy a Jackson car the price includes satisfaction—a dependable car and dependable service.

It is Not a Matter of Price

Economy in its broad sense means getting the utmost possible satisfaction for the money you spend. And that is the particular kind of Economy you secure in Jackson cars, no matter which

one of the three models your requirements suggest.

On a *satisfaction-giving* basis the three Jackson models for 1914 take the heart out of competition.

Jackson cars, at their price, have more quality features embodied in their design, construction and workmanship than can be found on any competing makes.

Jackson
"No Hill Too Steep,
No Sand Too Deep"

They have strength, sturdiness, stability. They have motors with that irresistible power that makes "No Hill Too Steep—No Sand Too Deep."

The "Olympic Forty" \$1385

Illustrated at the top of this page is the "Olympic Forty" for 1914. The illustration conveys some idea of the design, but the bigness, the beauty, the comfort—the photograph can't show

these. Only by an investigation and a demonstration can you experience the joys of its comfort, its power, its beauty, its quiet running. When you *know* these things you will say, "At the price of \$1385 it represents the maximum of motor car value at any figure under fifteen hundred dollars."

And as for the margin of safety in design and construction, only after thousands of miles of service—coming safely through any emergency—will you realize what an important part this plays in Jackson dependability. Old Jackson owners know.

The "Majestic" at \$1885

is for that great mass of buyers who want a standard car in the \$2000 class. A car of this size and power and beauty at \$1885 would be impossible to produce except by an efficient organization like the Jackson where value goes into the cars, not into "overhead."

The "Sultanic Six"

meets the demand of the buyer who wants nothing short of the best. Here is a five-passenger six-cylinder car for \$2150 that is the most satisfying car money can buy.

Jackson "Majestic"

Long stroke, four cylinder motor, $4\frac{1}{2} \times 5\frac{1}{4}$; 45 H. P.; electric cranking and lighting. Wheel base 124 inches. Tires 36x4. Full elliptic spring suspension front and rear. Full floating rear axle. Extra roomy body. Wide seats, wide doors, 10-inch cushions. Completely equipped. \$1885.

Jackson "Olympic Forty"

115-inch wheel base and wide seats; full 40 horse power; beauty of design second to none; full elliptic springs front and rear; smooth, quiet running closely approaching *silence*, electric cranking and lighting, and complete general equipment. Price \$1385.

Jackson "Sultanic Six"

Long stroke, six cylinder motor, 55 H. P.; electric cranking and lighting. Wheel base, seven passenger, 138 inches; five passenger, 132 inches. Tires 36x4 $\frac{1}{2}$. Full elliptic spring suspension front and rear. Full floating rear axle, ball bearing throughout. Completely equipped. Seven passenger model, \$2300. Five passenger, \$2150.

Write for catalog, or see your local dealer

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The Old Trails Highway

By
Lee Shippey



*Its Promise of Usefulness
Is Equally for Tour-
ist and Farmer*

IF YOU want to see America first—and best—you can make no better start than by motoring from coast to coast over the National Old Trails Highway, the first of the proposed national highways to be definitely located from ocean to ocean, and the best road, as a whole, to be found at this time. For a trip over this highway will not only impress you with the commercial enterprise, the agricultural greatness, the scenic beauty, the progress, and the infinite variety of this country, but will teach you the history—and perhaps thrill you with the spirit—of the pioneers. And, altogether, it will make you a better and more patriotic American to follow these trails of yesterday to lands of to-morrow. Incidentally, you will be traveling a national highway inspired by women. The Old Trails Highway has its Eastern terminus in New York, for the reason that all the rest of the country wishes to be connected with New York, but its real beginning is the Washington, or Braddock's, Road, which originally was a forest trail between the Potomac and Monongahela Rivers. Under the direction of George Washington, who was first in road building as well as in war and peace, this road was widened for army use while he was still a subject of King George II, and later was used by General Braddock; whose grave lies near it, when he marched against the French and Indians. The next link is the old Cumberland Road, begun by the United States Government in 1806. It was planned to extend from Cumberland, Md., to St. Louis, but never reached the Missouri city. Part of it was first constructed of earth, plant matter, and split poles, and became so nearly impassable that its improvement was made the "paramount" issue of the campaign of 1824. Henry Clay, John C. Calhoun, and John Quincy Adams were among those who advocated the rebuilding of the road, and Congress approved, almost unanimously, the bill they favored.

President Monroe vetoed the bill, but in those days, before the advent of railroads, the need of a highway to the West was so great that he reversed his decision, and the road was rebuilt as far as Vandalia, Ill. In 1836 the General Government gave the road back to the States through which it had been

built—and that was the end to progress on this first national highway until the spring of 1912, when the National Old Trails Association was organized.

The third link in the highway is the Boon's Lick Trail, extending from St. Louis to Old Franklin, Mo. This trail was blazed by Daniel Boone and his two sons, and the latter, less adventurous than their father, settled near a salt lick, where they built a thriving business, evaporating the salt, sealing it in

for the fact that the silent "e" does not appear in the names Boon's Lick Trail and Boonville, Mo.

The Santa Fe Trail started at Old Franklin in 1822, when a party of thirty men, headed by one William Becknell, made the first trading trip from there to Santa Fe, N. Mex., and for half a century after that was the route followed by the prairie schooners to Kansas, Colorado, and New Mexico. It was a high, dry road, passable at all seasons, and in all its length there was not a bridge or the need of one. This road became so important that it was surveyed by a Government commission, headed by Thomas Benton of Missouri. At Council Grove and McPherson, Kas., this commission made treaties with the Indians for a right of way forever for the Santa Fe Trail. Thus this eleven-hundred-mile link of the Old Trails Highway, though never improved as was the Cumberland Road, was also an original Government road. From Santa Fe to the Pacific Coast the highway follows the Grand Cañon Route, a trail established by the explorer Coronado and followed later by Don Juan de Cnate, over which the padres went out to the missions of San Gabriel and Monterey, and, nearly a century later, General Stephen W. Kearny marched the Army of the West to wrest California from Mexico. Besides the Grand Cañon, this route leads to the Petrified Forests, the Hopi villages (where the snake dance still is held), the Painted Desert, the prehistoric ruins near Walnut Cañon, the Cave Dwellings, and many other scenic and historic places. In southern California it connects with the perfect State highways California is building, and ends in San Francisco. It was because the National Society of Daughters of the American Revolution became interested in the movement to perpetuate these historic trails by linking them together in a modern highway in 1911 that the Missouri Old Trails Association called a National Old Trails convention to organize a national association.

The Missouri Society of Daughters of the American Revolution had just succeeded in getting Missouri to adopt the Boon's Lick and Santa Fe Trails as its first State highway, in spite of the strenuous opposition of advocates for competing routes, and the Missouri



*A picture showing both the obstacles to and the achievements of Arizona in the matter of road building.
This is the Roosevelt Dam and Road*

hollow logs and floating it down the Missouri River to St. Louis. The settlement they founded became an important trading point, and the trail to it the main highway to what was still the wilderness of the West. The Boones were Chaucerian spellers, which accounts



A well-graded smooth earth road at Columbus, Kansas, crowned and well-drained, at a cost of \$56 per mile. This could serve as a model to several sections of the country



This massive concrete girder bridge was built by the Kansas State Highways Department in the ordinary course of road making. The State of Kansas is wide-awake

These Start Any Motor—Any Time— On First Quarter Turn

Champion Priming Plugs will end all Winter starting troubles for your Car, Motorcycle, Motor Boat or Engine. They put a rich mixture right at the plug's firing point and a hot, fat "**Champion**" Spark gives you a real explosion instantly, even if your cylinders are ice cold.

Aren't you tired of fighting cold cylinders and poor gasoline.

You found out long ago that you must prime your motor if you want to do Winter riding.

The best of gasoline will not vaporize when your cylinders are frosty, and present day fuel is a long ways from being "best".

You must prime your motor at the top of the cylinder so as to produce the initial explosion.

The "**Champion**" way is the easiest, most efficient, and by far the cheapest way.

Only a few drops of gasoline—at the right place—are needed to start your motor instantly.

Champion Priming Plugs put those few drops just where you want them—and a "**Champion**" Spark does the rest.

The cost, comfort considered, amounts to nothing.

Champion Priming Plugs are the best of **Spark Plugs**, plus a perfect prime-r.

You stop taking chances when you use the "**Champion**", judged either as a **Spark Plug** or a **prime-r**.

We guarantee both workmanship and your satisfaction, or your money back.



Champion Priming Plugs do what priming cocks cannot do: create gas at the firing point.

Look at the illustration. You can see the operation easier than we can tell you about it. There is no fouling of spark points nor leaking of compression.

Champion Spark Plugs are factory equipment on three-fourths of all the cars made in America, including the Ford, Overland and many others of the best known cars.

They are made in the largest factory in the world devoted exclusively to spark plugs. Our new factory's daily capacity is 25,000 plugs.

If your dealer is not ready to supply you with **Champion Priming Plugs**, don't delay but send us the coupon below properly filled out, with bank draft, P. O. or express money order attached, or your check for \$5, and we will send you a set of four **Champion Priming Plugs**, prepaid, the day your order is received.

Champion Priming Plugs cost \$1.25 apiece—everywhere. They are made in a special size for motorcycles. Disregard the coupon when ordering them for that purpose. Send the name of your motorcycle with your remittance.

CHAMPION SPARK PLUG CO., Toledo, Ohio

Gentlemen: Herewith find \$5 remittance, for which send me four **Champion Priming Plugs**, prepaid.

My car is a _____ of the year _____

Name _____ State _____

Street _____ City _____ Dealer's Name _____

Champion Spark
203 Avondale Ave.



Plug Company
Toledo, Ohio

road builders were so impressed that they felt any route favored by the national society was certain to become a national highway.

The convention was held in Kansas City in April, 1912, and was attended by over five hundred delegates.

The Governors of the States through which the route runs had named the delegates. Judge J. M. Lowe of Kansas City was elected president, and a vice president for each State was chosen.

Links of State Highways

THOUGH it was only within the last year that the route of the Old Trails Highway was definitely and finally located, it is rapidly being made a good road its entire length.

The route it will follow through Pennsylvania is being made a macadam road, and Maryland and West Virginia are making the old Cumberland Pike an even better road than it was when Henry Clay declared it to be the finest in the world. Ohio has adopted it as its first State highway, and contracts for its construction from Wheeling, W. Va., to Columbus have been let. It is already an excellent road across Indiana and most of Illinois. Missouri has made it its first State highway. Across Kansas it is a perfect earth road in dry weather, of

of Ohio, Illinois, Missouri, Kansas, Colorado, New Mexico, Arizona, and California, and for a number of county bond issues in Indiana. In every case the influence of the road has been at least Statewide and often wider.

Let Missouri serve as an example. Before this highway was projected, Missouri's roads were among the worst in the Union. Now Missouri has a system of good roads, maintained at State expense, connecting all its county seats, and Colonel Frank W. Buffum, State Highway Commissioner, believes this year it will

It used to be that Western farmers opposed building "speedways for joy riders," but that time is past.

When the farmer learns that it costs him, on the average, twenty-three cents a ton a mile to haul the products of his farm to market, while it costs the French farmer only seven cents a ton a mile, for the reason that France has a national system of good roads, his self-interest is touched. When he learns that in this country the percentage of illiteracy is from eleven to fourteen times as great in sections which have poor roads as in sections which have good ones, his heart is touched.

And when the real estate man backs up both assertions by telling him it is hard to get a fair price for a farm not on a good road nowadays, and practically impossible to sell one to a family in which there are children, he is convinced.

Bringing the Market Near

THESE are only a few of the things the farmers are being shown.

They are learning that modern roads are as essential to profitable farming as modern implements.

They are learning that a span of horses can haul more than three times as much over an ordi-



On the Nevada desert—robbed of its terrors by the automobile

which the western part of that State has a plentiful supply, and the eastern counties are voting bonds for its improvement.

Colorado, New Mexico, and Arizona have made their links State highways and are using convicts to build beautiful and lasting roads, blasting them out of solid rock in many places to secure good grades, and in California the highway is practically complete.

An Unredeemed Pledge

WHEN Ohio was admitted to the Union in 1803 the United States Government pledged itself by written compact that one-twentieth of the net proceeds from the sale of public lands in the State should be appropriated by Congress for the building of a road from the Atlantic to and through the new commonwealth.

The Government made similar compacts with Indiana, Illinois, Missouri, Arkansas, Mississippi, and Alabama.

In fulfillment of those compacts, the Cumberland Pike was built to Ohio and partly built as far west as Vandalia, then the capital of Illinois, but the other States received no benefits from their compacts, and are asking for them now. Representative Henry A. Barnhart of Indiana has introduced in Congress a bill appropriating \$5,000,000 "for the redemption of the Government's solemn pledge to the States of Ohio, Indiana, Illinois, and Missouri," and if it passes it will pave the way for a similar appropriation for the Southern States, which would be used for the southern end of a Gulf-to-Canada highway. But the Old Trails Association is not waiting for the Barnhart bill to pass, nor for other Federal help. It considers Federal help too uncertain to wait for, and is systematically working for improvement of the highway by States, counties, and townships, with steady and increasing success.

Rousing States from Apathy

ALREADY the Old Trails Highway has proved of incalculable benefit to every State through which it passes.

Its national character appeals to the imagination, and the interest it has aroused has been largely responsible for progressive changes in the road laws



Marysville road in the progressive State of Washington

vote a tax which will provide \$2,000,000 annually for State highways.

From an apathetic State it has changed to a hotbed of good-roads sentiment, and when Governor Elliott W. Major called for volunteers to work the roads two days last August 200,000 men and women responded, the women serving basket dinners to the road makers. Governor Major's example was followed by other Governors, and similar road days were held in Arkansas, Kentucky, Oklahoma, Nebraska, and in other States.

Stimulating the Farm

BUT the Old Trails Highway did not wake up only those States through which it passes—it aroused whole groups of States, particularly in the West, which is full of historic trails. Movements to improve the Overland Trail, the Mormon Trail, the Oregon Trail, and many others followed, and highway associations were formed everywhere. The whole West



A palm-bordered stretch of the California State Highway

have not begun to bring prosperity.

The owner of a general store in a little Missouri town in which not a business building had been erected since the Civil War told the writer the highway had given the town such a "boom" that three substantial brick store buildings were going up there.

Most important of all, they are learning that good roads vastly increase the pleasures of living in the country.

The farmer on a good road is within easy reach of his town and his neighbors at all seasons. He does not have to lead an isolated life, nor does he find it hard to keep the boys on the farm, nor to keep farm hands.

Distance in the country is no longer measured by miles, but by minutes, and the farmer who lives ten miles from town on a really good road is closer to it than one who lives two miles from the courthouse square on a bad road.

The Old Trails Road, as an object lesson, and the Old Trails Association as a dispenser of information, are calling the attention of all the States through which the highway passes to these facts, with the result that thousands of miles of country roads connecting with or adjacent to it have been vastly improved. The value of the highway to farmers in this way is incalculable.

Even the direct financial benefits of such a road are incalculable. It has been estimated that motor tourists, attracted to Colorado by the splendid system of highways that State is building, spent more than \$3,000,000 there during the past year.

Not every State has as many attractions for tourists as has Colorado, but there is not a town or village along the Old Trails Road to which the tourists



The Ada County road, in the Boise River Valley, running out of Boise, Idaho

not only joined the good-roads procession but took a place near the front.

The effects of improved roads are particularly striking in the West, for the reason that they are newer and fewer there.

And, as Westerners put it, the prairies are afire with good-roads enthusiasm. The United States Office of Public Roads, the State highway commissions, and the numerous national and State road associations have done a wonderful work in educating the people, and they have effected an entire change of sentiment.

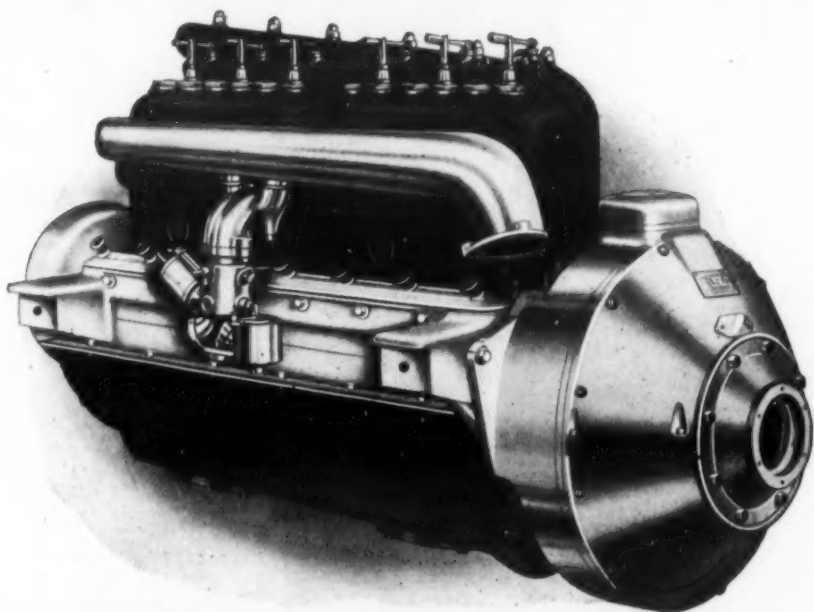
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Better Than a Railroad

IT IS a far better thing for our town than the main line of a great railway would be," he said, "for these highway tourists see the prettiest part of our town and stop to visit us and take dinner with us, while railway tourists would go through the dirtiest parts of our village at forty miles an hour."

USL USL USL USL USL



The U-S-L Starter installed on Sheffield-Simplex automobile engine, showing how the U-S-L takes the place of the fly-wheel



Motorists:—

Consider These Commanding Features

Not only is there but one rotating part in the U-S-L but this part is utilized by the engine as a fly-wheel in place of the common cast iron wheel. This rotating member is fastened directly to the engine shaft.

Gearless—Chainless—Noiseless

Thus, there is no need to employ gears, always noisy, troublesome, nor chains and sprockets, either to spin the engine or to derive and absorb power from the engine to generate current.

Not a Bearing to Oil

The U-S-L does not add a single running part to the car—adds no excessive weight—does not disturb the balance of the car—(because being built onto the main shaft insures "central weight") and has not even one bearing to oil. This is why, finally, "the U-S-L Starter is the Silent Starter."

Ample Power Always

Great in power, the U-S-L turns the engine over at 150 to 400 revolutions a minute—and at once—1000 times out of 1000.

No Noise—No Fuss

There is no noise—no jerk—no jar. The motion is smooth, even. Your U-S-L start is as free as the Summer breeze—with as little fuss.

Simplicity Itself

The U-S-L is automatic perfection—yet simplicity itself. It is endorsed by all leading engineers.

Current for Lights

In the U-S-L you also have a complete lighting plant. When the engine reaches a certain speed the starter automatically becomes a generator, supplying current for recharging and lighting. Even for display signs on commercial vehicles, no other lighting system is needed.

"Across the Seas" for the U-S-L

In all the world there's no other Starter like the U-S-L. Hence the Sheffield-Simplex, a noted car of England, adopts this masterpiece. Hence it is chosen by the Delauney-Belleville, the famous French car.



Electric Starter and Lighter

The Silent Starter

The Sheffield-Simplex and Delauney-Belleville are among the world's highest priced cars. The bare chassis of the former sells for \$5,000.00. Its fame circles the globe.

The U-S-L is the most costly of Starters. It was chosen on record. Merit alone was considered. Past performance won the selection.

The engineers recognized the ideal design of the U-S-L and endorsed it. These are the reasons for "crossing the seas" to get the U-S-L.

In this country you will find the U-S-L as standard electric equipment on these progressive cars:

Jeffery; Willys-Knight;
S. G. V.; Moyer; Rayfield;
Rochester Motor Fire Pump

—the last, 8 cylinders, 6 in. x 6 in.

Each of the makers pays the highest price in the Starter field to get the U-S-L. Because each recognizes that the U-S-L system is the right

The U. S. Light & Heating Co.

General Offices: 30 Church Street, New York

Factory: Niagara Falls, N. Y.

Branch Offices and Service Stations: Chicago New York
Boston Cleveland Buffalo San Francisco Detroit St. Louis

principle for starting automobiles. For your car—choose the U-S-L equipped.

U-S-L Storage Batteries

U-S-L Storage Batteries, for pleasure or commercial electric vehicles, are the first to be sold with a definite mileage guarantee without extra price. Before buying your new electric, or renewing the batteries in your present one, write us for information concerning the U-S-L guarantee.

For Booklets, Mail Coupon

The U. S. Light & Heating Co.
30 Church Street, New York

Col. 1-10-14

Gentlemen:—Please send me the U-S-L Bulletins checked below:

- ☐ 501—U-S-L Starter and Lighter for Automobiles.
- ☐ 111—Automobile Electric Light and Engine Ignition.
- ☐ 505—U-S-L Storage Batteries for Automobile Starters.
- ☐ 110—U-S-L Storage Batteries for Independent Electric Lighting.
- ☐ 101—U-S-L Storage Batteries for Stationary Service.
- ☐ 102—Power for Electric Vehicles—Pleasure and Commercial.
- ☐ 207—Electric Light for Railway Cars.

Name.....

Street.....

City..... State.....

USL

USL

USL

Beefsteak vs. Bankruptcy

SOMEWHERE in modern literature there is the sad story of a piece of steak—a rare, red beefsteak that was never eaten. A poor old prize fighter is pitted against a young and strong but unskilled opponent. The veteran—he is an old, old man, probably all of thirty—must win the fight or, with his wife and many, many crying children, be thrown into the street for nonpayment of rent. He has not had enough to eat, and goes to his fight half nourished, badly understaked—or words to that effect. With his skill and strategy he creates during the fight the opportunity for a clean-cut victory; but the creation of the chance takes all his strength. He cannot put over the finishing blow. He didn't have the steak.

This story is different.

Billy Moran, in partnership with Rudolph Miller, owned the Golden State Garage, with assets as follows:

1. A reputation for good work and cheerful-ness, without overcharge.
2. One old chain-drive racing car, without mud guards. This honorable vehicle served as the firm's work car; it was too old to be sold even for junk, and when carefully looked after was good for sixty or more miles an hour—sometimes for an entire hour. By careful manipulation it could be driven through traffic at a speed as low as twenty miles an hour.
3. A promising assortment of garage tools and sundries.
4. A patent-applied-for shock absorber—\$40 the set.
5. A \$900 lathe, necessary for the manufacturing of the aforesaid shock absorber.

The firm's liabilities were:

1. A young army of unpaid bills, embracing such items as three months' garage rent, \$150; gasoline, \$22.50; one week's pay roll, proprietors not included, \$41; two final installments on the important lathe, \$250 each—\$500.

The main trouble was with the final payments on the lathe.

"Ruddy," said Billy Moran, "the last payment on that blooming business is due Friday. To-day's Wednesday. What's the answer?"

Billy was a brown-faced, black-haired chap, whose appearance certainly belied the good name Moran. By the same token, Rudolph Miller was as fine a red-headed Irishman as you would care to see, with blue eyes and freckles alongside the nose of him.

"What of it? We'll make the duffer give us another month. By that time we'll have enough coming in from the absorbers to make a big payment. Quit your thinkin', Billy—it's not becoming to your black face."

But Moran was serious. "Preston was in here the other day," he remonstrated, "and he sorta hinted they'd been too easy on us for their own good. You know we've not even made a hole in the payment due last month yet. Those guys may try to get nasty, Rud. Lemme tell you they've got my Angora sitting right up and taking notice."

HE TURNED his head as a short, stocky man rounded into the wide street door of the garage and walked toward them. "Betcha here's one of 'em now!" He shot the words to his partner in an undertone out of the corner of his mouth.

"Mr. Moran?" Naturally enough the newcomer, catching sight of freckles and roan locks, addressed Miller, who motioned toward his partner. Moran took care of the firm's outside business.

"My name's Deering, Mr. Moran," explained the stranger with a not pleasant cordiality of manner; "I'm with Hewitt & Reynolds, who represent the Preston-McCreedie Lathe Company. We've been asked to look into the matter of a delinquent payment on the lathe you purchased a few months ago. The final payment is due next Friday, and you've not yet done anything toward taking up the amount due last month. Sorry to have to press you on the matter, Mr. Moran, but my people have their orders, you know. If you haven't two hundred and fifty for us by half past two on Friday we'll have to take the machinery out of the shop." He handed Moran a paper, the official notification of the collecting agency. "If you can take care of the single payment, the final two-fifty can run along a while. I call that generous."

He waited a moment for a comment, but there was none—at least no official comment. Ruddy Miller looked around the floor for a moment, as if searching for something, and then selecting an irregularly shaped oil stain carefully expectorated upon it—a beautiful shot. But there was no formal reply.



By John Amid

ILLUSTRATED BY R. M. BRINKERHOFF

"Good day, gentlemen," said Mr. Deering of Hewitt & Reynolds at last. "Beautiful weather we're having this week!" And he passed from the partners' horizon.

FOR several minutes after the leave-taking the firm of Moran & Miller stood silent. This was one of those momentous occasions when mere language seemed sadly inadequate. At last Moran, still without speaking, sighed and stuck the unopened notice in his hip pocket. He went to the garage door and looked out into the bright sunlight. Ruddy followed him. "Well?"

"Well?" The two men looked at each other. "It's up to us, Rud. We're gone if the lathe goes. Darn the luck! I've been worrying about it before, but I never thought of a dirty piece of work like that! Why, Lord Henry! That's less'n two days!"

Rudolph blinked at the light, but said nothing. The partners turned and entered together the small boxed-off room at the front of the garage that served as an office, and, while looking over their accounts, discussed ways and means. At the end of an hour they emerged with set jaws, ready to begin the battle.

They went separate ways, each with a set of names. Just as dusk was settling over the city they arrived again at the doors of the garage almost simultaneously and compared notes. Moran had managed to collect twenty-one dollars, Ruddy Miller only six.

"And half those guys have sworn they were our friends 'til they were navy blue in the face!" complained Red Miller bitterly. "Nix on this collection game for mine!"

"Darn the luck!" said Billy Moran.

THEY ate supper together at Moran's little home hurriedly. Miller was not married. The Morans lived near the garage, which was convenient. But it was rather a meager meal, for Mrs. Billy had counted on Moran's bringing home a steak, and he had forgotten.

After supper the partners tried again, rounding up every man who owed them money, buttonholing each acquaintance who called himself their friend. But the results were even worse than in the afternoon. Moran raised only a five-spot; Miller not a single cent. Discouraged and dog tired, they separated at midnight at the garage, agreeing to continue the war at seven o'clock.

Wednesday was a bad day. Noon found them again comparing figures in the little box of an office. Their total for nearly twenty-four hours of the most strenuous collecting of which they were capable was less than fifty dollars.

"But we've got to get it, Kld! Got to! That lathe means us! If it goes, we're gone. No more absorbers—and they're all we've got when you come down to it. And, Ruddy"—Moran's tone was vibrant with purpose—"we've got to do it! There's a pile of money waiting for us in those absorbers if we can only put it across for another three months! Jumping Christopher! We've got to do it!"

THEY ate no lunch. It was a habit they had dropped into during the weeks of close sailing that had so far been successfully weathered. Not that either would admit that the small sums of money involved actually made any difference—but both were agreed that the average man ate too much, you know. Besides, it saved time.

They had canvassed all their friends and business acquaintances, and every one of their debtors within reach. So they agreed to swap lists and start in again. At least they would die fighting.

But when they met in the little box of an office at closing time there was nothing encouraging to report.

"Of course"—Moran hesitated—"there's Jackson." Jackson was a young farmer, whom both liked, who lived nearly forty miles from the city. He owed them nearly ninety dollars, but they had not tried to collect it, knowing him to be on a financial precipice.

"He might see some way to help us out," agreed Miller. "We could make it to-night in our car."

Moran turned his head a fraction of an inch and called to the back of the garage:

"Curry down the old war boat, Frank. Me an' Red's going joy riding to-night."

Frank Henly, shop foreman in the partner's absence, came to the office door a few moments later.

"I don't savvy quite what's up, fellers," he said apologetically with the easy democracy of a master mechanic, "but if it would make any difference, you can just let the fool pay roll slide until further orders. I was speaking to the boys, and we won't a one of us be needing money for quite a piece—if it would help any."

Moran shook his head.

"Thanks a lot, Frank. You guys are certainly the white bunch. But it's bigger'n the pay roll this time. Two-fifty by to-morrow noon, or out goes Mr. Lathe."

WITH a spitting exhaust, as in the old racing days, the work car shot away from the garage in the edge of the evening. People on the streets turned to look at the partners as they flashed by on their forlorn hope with the big searchlights of the road racer throwing a wide beam of light ahead. A half-eradicated figure "16" showed on the big hood. "Cut her loose, Old Scout!" yelled Rud to Moran, who was driving, as the exhilaration of the speed got into his blood. The city dropped behind them.

"Bet your life!" Billy called back above the roar of the car. "Look at 'er hike!"

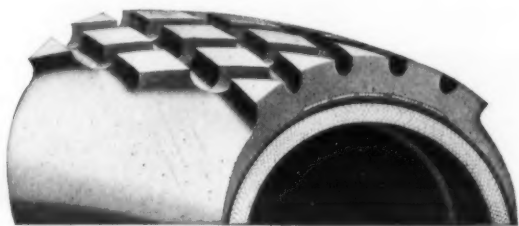
Like a game old race horse the big car leaped to its work, picking up and dropping like a flash, one after another, the outward-bound touring models of home-going suburbanites. One or two of the drivers that they passed opened up when they heard the roar from behind and tried a brush with the worn racer, but with a single exception they were quickly distanced. The exception was a powerful new-model roadster, built on low racing lines, and with an exceptionally long wheel base for a two-passenger car. The driver of this roadster showed up in the glare of the car's lights as a young chap, who turned a clean-cut profile for an instant's glance at the speeder coming up from behind. Keeping his own car well to the side of the road, he at the same time opened up his throttle and threw off his muffler as a challenge to battle.

Nor was he any mean opponent. While showing both fine driving and clean sportsmanship in keeping so well to his own side of the road, he jumped his car into a terrific gait that, as the old car came up, held the big racer nearly even. The new model was traveling at a tremendous clip, however, and only when the flying pair reached a long grade was the old car able to show her heels. Then Moran opened her up wide for the first time, and with the full racing fuel in her big cylinders the old winner picked

Four Features

Found in No-Rim-Cut Tires Alone

They Have Made These Tires—by Long Odds—the Largest-Selling Tires in the World



All-Weather Treads

The latest Goodyear invention. As smooth as a plain tread on dry roads, a resistless grip on wet. A tread for all wheels at all seasons.

A double-thick tread made of very tough rubber. The grips are deep and enduring. They last for thousands of miles. The edges stay sharp. They face the skidding direction, which is 45 degrees.

The blocks widen out to distribute the strains, just as with plain tread tires. They are flat, broad and regular, giving the smoothness of plain treads. Yet they supply, when needed, a tenacious grip.

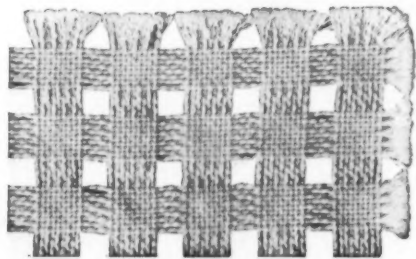


Rim-Cutting Ended

The tire base embodies six flat bands of 126 braided wires. These make the tire base unstretchable. So No-Rim-Cut tires do not hook to the rim. You set your rim flanges to curve outward, not inward.

This makes rim-cutting impossible. It gets rid of the greatest tire ruin. Statistics show that with old-type tires almost one tire in three is discarded for rim-cuts only.

This braided wire feature, which we control, is the only feasible way which has ever been found to make a tire of this wanted type.



Saves Loose Treads

This patent open fabric forms our breaker strip. In other tires, this breaker strip—at the base of the tread—is rather closely woven. It is near this point that tread separation comes.

We force the tread rubber down through these openings, forming hundreds of large rubber rivets. Then the whole tire is vulcanized en masse. This adds sixty per cent, by actual test, to resistance against loose treads.



No Wrinkled Fabric

Countless blow-outs are caused by wrinkled fabric, due to vulcanizing under pressure on an iron core alone. The picture shows the result of this, and why these weak spots blow out.

To eliminate this, we final-cure each tire on air bags shaped like inner tubes. This stretches the fabric and adapts it to actual road conditions. This extra process, to save you blow-outs, adds to our tire cost \$1,500 daily. And no other maker does it.

Thus we combat the four greatest troubles found with modern tires. By these exclusive, costly features we have saved motor car owners many millions of dollars.

By them we also won the top-most place in Tiredom. No-Rim-Cut tires are now by far the most popular tires in existence.

GOOD YEAR
AKRON, OHIO

**No-Rim-Cut Tires
With All-Weather Treads**

They cost no more than other standard tires. This is due to our matchless output. Men used to pay for them, when our output was smaller, one-fifth over other prices.

You will buy these tires when you know them. No other tire offers one of these features. No-Rim-Cut tires offer them all.

THE GOODYEAR TIRE & RUBBER COMPANY, AKRON, OHIO

Toronto, Canada
Write Us on Anything You Want in Rubber

London, England
Dealers Everywhere

Mexico City, Mexico
Branches and Agencies in 103 Principal Cities

up another ten miles in spite of the rise and fled away from the new machine with a roar that was almost a yell of triumph.

Jackson lived far at the side of the valley, several miles from the main-traveled boulevards. Carefully Moran piloted the old car over the rough going of the lesser-traveled roads, pulling up at last in front of the dark farmhouse.

"Jackson'll see his way to pull us through somehow," he told Miller as he snapped off the spark and stepped from the car. In spite of his efforts to guard against a possible disappointment, his hopes had risen during the ride.

There was no response to his loud knock at the door. He noticed how deserted the place seemed. There was no barking of dogs—none of the various animal sounds one expects to notice about a farm.

As Moran walked back to the machine he realized for the first time since starting out how tired he was. With Miller he decided to inquire of the neighbors concerning Jackson. It was only a short run to a lighted house in the vicinity, where they learned that on account of his money troubles Jackson had left his farm and taken a salaried position as manager of some orchards in an adjoining county. No, their informant did not know just where.

"Darn the luck!" said Billy Moran.

WHEN he reached over to crank the machine he noticed the odor of evaporating gasoline.

"Gas leaking, Rud," he announced. It seemed the final straw.

They inquired for the nearest garage; it was some miles away, and with almost no fuel remaining in the tank set out on their return journey. Before they had gone a mile the big car stalled at the side of the road, and the partners trudged afoot to the rescue station. The garage owner, sleepy and surly at being routed from his dreams, refused either to take them back or to let them have a car. It was long past midnight when they again reached the city, worn out with their fruitless jaunt.

Friday morning dawned clear and hot. Entering the cool garage just after seven o'clock, Moran found everything running smoothly. The two or three repair jobs were coming along well; a big brown car had just been brought in for a set of shock absorbers, and Frank had started work on them. They would mean forty dollars at sundown—if the bill was paid immediately. With a sigh, Moran walked to the door and looked out into the bright morning light, trying to realize the fact that these customary surroundings were on the brink of an upheaval. Just a few more hours now, and, unless a miracle came to pass, the lathe would be gone and the firm's other creditors crowding for payment of their claims. Then there would be the inevitable failure, and within a few days, or weeks at the utmost, the same old sun would be shining on some new lettering on the garage office windows. And the shock absorbers with the anticipated wealth in their patent! They would be merely a dream of the past, left behind with the firm's shattered financial reputation.

FOR an hour Moran sat in the little box of an office with his aching head in his hands. He was tired and stiff from the unlucky journey of the preceding evening. Ruddy did not show up until nearly nine o'clock. Before he turned up Moran had decided upon a further course of action. Though obsessed with a dismal foreboding of absolute failure, he resolved to keep up the fight until the last possible moment.

First he telephoned to the advertising departments of each of the city papers, putting the lathe on the market at eight hundred dollars—two hundred below the regular list price—an attractive figure. "If I can only get them to hold off until Monday," he thought, "I may be able to sell the thing, and, after paying them the blooming five hundred, have enough left for the first payment on another." But in his heart of hearts he knew that there would be no extension of time for a single day. He was dealing with Hewitt & Reynolds now—not with the Preston people—and he knew the collectors' reputation. But, anyway, it

was a fighting chance, and at most would cost only a few dollars.

Then, and not until then, he called up the Traders' National, where he did his banking. In spite of himself there was a hesitancy in his voice as he asked for Mr. Boles, the cashier. When that busy man was on the line Billy steeled his voice as well as he could.

"Mr. Boles? This is Moran of the Golden State Garage. Mr. Boles, we're in something of a corner for a day or two, and I wondered if you could let me have a couple of hundred for a short time—say till the middle of next week." Strive as he would, he could get no confidence in his tones, and felt that he was courting defeat. The answer was crisp, almost curt.

"Why, I'm afraid we're carrying you now for as much as our custom allows, Mr. Moran. Let's see—we have your notes for four hundred, have we not?"

Moran nodded a miserable assent at the telephone—then remembered and gave a reluctant, "Yes,

Then, with the indomitable resurgence of youth, he dismissed the entire matter with a wave of his hand.

"Ruddy, old horse, I guess we're done. Forget it. We did everything we could. Come on and have some eats. We'll take the wife a steak two miles thick."

"Trot out something genuine, Pokey," he admonished the butcher at the corner market. "Real cow this time, Nix on that!"—as the man invitingly turned toward them the sliced side of a fine looking sirloin—"Porterhouse! Nothing less! And a good big one, too."

So the butcher invaded his refrigerator room and brought out the best he had.

"That's more like it. Now cut something. There you go again! Do we look like pikers, Pokey? Just because we bought a little clubber from you once, have we always got to get that kind? Move your knife back, man! Don't you know all real steak comes thick? And you a butcher too! We're trying to buy a piece of meat! What's that? The dickens I can't! Why, my wife can cook steak a foot thick, I tell you— There! that's the stuff. Now cut another

one just like it. We've got to get enough for a meal!" Billy's spirits were coming up in mere anticipation, in spite of his fatigue.

THEY lugged the two big pieces of porterhouse to Mrs. Billy, and she opened her mouth in delighted astonishment, then sobered instantly as she thought of the price they must have paid. Such a lavish expenditure as it must have been shocked inexpressibly the economical, housewifely soul of her.

"Why, Billy!" she remonstrated, "it must have cost an awful lot!"

"Cook it! Cook it!" yelled Billy Moran, dancing about. "I tell you we've got to be fed! We're thinking of drawing out of the garage business, and we want to celebrate while the celebratin's good. Anyway, what's a couple of dollars between friends?"

It was a wonderful

meal. Such steak! Two such steaks! Two full inches thick, broiled to a luscious brown crispness on the outside, red and rare and juicy in the center. And what dish gravy! Catching the reckless spirit of the occasion, Mrs. Billy spread over the sizzling pieces of meat nearly half a pound of butter, with pepper and salt to match. Then there were the smoothly mashed potatoes that Billy considered an inevitable adjunct of broiled steak, and a newly opened can of French peas, cooked in a smother of cream—the entire contents of one of the snug little dairy cream pots.

It was one o'clock when they sat down. It was two when, with a huge sigh of satisfaction, Billy Moran pushed back his chair.

"Now for the big act and the curtain!" he announced to Ruddy Miller as they waved good-by to Mrs. Billy. But the tone! What gave it that ring? Well, the fact was that the let-up of suspense was like relief from toothache; that relief had given zest to the beefsteak, and now the beefsteak was giving an edge of exhilaration to the relief. Exhilaration may count for more than capital in business. Even Ruddy, usually none too observant of such minor psychological points, himself cheered by the big feed, spoke of the change.

"Golly, Bill, you sound like going broke was a fine game," and he seemed rather gay about it himself; "anyhow," he added gratefully, "we're one steak to the good."

BILLY MORAN grinned and champed his jaws at the recollection. Mr. Deering, of Hewitt & Reynolds, was waiting for them at the garage.

"Well, gentlemen?" he asked inquiringly, as they came up. "What have you to tell me?"

The man's manner was not pleasant. Evidently he was certain that they were not able to meet the demanded payment. It was with difficulty that Billy Moran controlled his tongue, at the tip of which trembled a rash retort.

Two moments before, thinking of nothing in the world except the fine flavor of the steak that he had just eaten, it had been his intention to capitulate as jauntily as possible, and arrange for his permanent retirement from the garage and shock-absorber business. Now, of a sudden, his resentment against Deering and all that he represented suddenly welled up within him, and he felt it impossible to admit defeat to this sneering underling.



"Why, Billy!" she remonstrated, "it must have cost an awful lot!" "Cook it! Cook it!" yelled Billy Moran, dancing about

str. He hated himself for the unintended "sir." "I'm afraid we wouldn't want to go any further, at the present time, Mr. Moran."

"Well—at least you'd be willing to protect us until, say, Monday, on a small overdraft?"

"Overdraft for two hundred? Well, hardly! That's not what I'd consider small, considering the size of your account, Mr. Moran."

As he hung the receiver back on its hook, the senior partner of Moran & Miller felt as though he had been called down like any schoolboy. He felt humiliated, ashamed, defeated. Why hadn't he argued the matter? He turned as Ruddy Miller entered the office.

THEY were about at the end of their rope, and both knew it. One thing only, that they could think of, remained untried—they might find friends who would endorse a note for two hundred for them, or possibly even run across loan sharks who would, for an exorbitant rate of interest, be willing to advance them the money necessary to continue their desperate gamble.

But they were able, in the few short hours that remained of the forenoon, to find neither. For one wild instant, as they compared notes for the last time at the stroke of twelve, Moran considered the possibility of finding some one with whom to "wash" checks, in order to gain the wretched opportunity to continue the gamble for a couple more days. But he shook his head. Too risky.

"How about going to old man Preston himself and asking him for a little more time?" suggested Rud desperately.

"No good. He wouldn't dare monkey with Hewitt & Reynolds after once turning the thing over to them, even if he wanted to. Besides, if he's once got some one to hide behind, old man Preston isn't going to let anything like the little old four hundred we've already paid 'em get by. That's clear money for them the minute they get the lathe out of the shop—we haven't got a look-in."

"Then what?"

"Nothin'. Darn the luck!" Moran sighed heavily, and drew his tired hand across a damp forehead.



The Mitchell Little Six \$1,895
Fully equipped

Eighty Years of Faithful Service to the American Public

The Mitchell-Lewis Motor Company has the enviable record of *eighty years of faithful service to the American public*. Bear this fact in mind when you get ready to buy a car, for it operates as *insurance of quality*.

No thoughtful business man ever buys a *commodity* or a *luxury* or a *necessity* without looking into the character of the men who make it. This rule of trade is more imperative in the purchase of an automobile than almost anything else you can name.

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You've got something behind you when you buy. Our standing and prestige constitute a *bulwark of safety*. Add to this the remarkably fine character of the Mitchell Models and your purchase is *as solid as the Rock of Gibraltar*. We have been building popular-priced Sixes longer than any other firm in America, so that our Sixes are in no sense experiments. They are *proved* successes. Ask any one of 25,000 owners.

The Mitchell Models for 1914:

The Mitchell Little Six—fifty horse-power—132-inch wheel base—36 x 4½-inch tires—two or five-passenger capacity - - - - -	\$1,895
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Equipment of all the Mitchell Models Included in the List Prices Here Given:

Electric self-starter and generator—electric lights—electric horn—electric magnetic exploring lamp—speedometer—mohair top and dust cover—Jiffy quick-action side curtains—quick-action rain vision wind-shield—Tungsten valves—demountable rim with one extra—double extra tire carriers—Bair bow holders—license plate bracket—pump, jack and complete set of tools.



Prices F. O. B. Racine

Mitchell-Lewis Motor Co.
Racine, Wis., U.S.A.

Eighty years of faithful service to the American public



Prices F. O. B. Racine

Acting on the impulse of the moment, with an audacity born of the red blood that the new fuel was pumping through his arteries, he seated himself at the office desk and filled out a check for two hundred and fifty dollars on the Traders' National. "There!" he said, as he blotted it and handed it to Mr. Deering.

THAT individual took the piece of paper with considerable astonishment, and some hesitation.

"This is—this is good?" he asked, as if hoping against hope for a negative.

"No good at all. No funds in the bank. Want to talk to 'em yourself?" He swung around and snatched the receiver from its hook. "Main eight, three hundred, please. . . . Hullo! Traders' National? I'd like to speak to Mr. Boles. . . . Hullo, Mr. Boles? This is Moran of the Golden State Garage. I'm just checking on you for two hundred and fifty. That's a little more than what I was asking about this morning, but I'll be over in a little while to make a deposit—enough to cut it to two hundred or a trifle under. If you'll let the check through, I'll have it covered by Monday at the latest. If you want to throw it back, it'll put us out of the running—*right—now.*" Without waiting for an answer, he clapped his hand over the mouth of the transmitter and turned to Deering, the collector. "Want to speak to the cashier, Mr. Deering?"

Gingerly, Mr. Deering took the earpiece. "Mr. Boles?" he asked uncertainly; "cashier of the Traders' National? No, no. I'm Mr. Deering of Hewitt & Reynolds, attorneys. Mr. Moran here has just given me his check on you for two-fifty, and I want to know if you'll honor it. What's that? Oh, yes, I see. Yes, sir. Thank you." Hesitating an instant, he hung up the receiver, then rose, still somewhat dubious.

"Well," he said to the partners, "he says he's never yet refused to honor any check you've drawn, so I guess it's all right. But it sounds pretty funny to me!" he ended viciously. "That's all, isn't it, gentlemen?"

"Not quite!" Moran took a step toward him, and the stocky man instinctively drew back from his threatening frown. "There's one thing more. I don't like your face and I want you to take it away from here and keep it away. I'm the conductor of this shop, and if you come in here again and bring your face with you I'll punch it! See? Now get!"

Mr. Deering got.

"Well," said Billy as the shadow disappeared from the wide doorway, "that's over." He heaved a sigh

of relief. "I felt this morning that Boles would stick with us if I could only get hold of him right. I couldn't get him this morning somehow—didn't have the nerve, or something. But we're not out of the woods, Ruddy, old horse, not by a long way. We've got to sell that blooming lathe before Monday, I reckon. Anyway, got to rustle the coin somehow." He broke off as another shadow fell across the door.

The newcomer had a noon edition of one of the city dailies in his hand, and approached Moran confidently. "You have a lathe for sale here?" he asked. Moran nodded. "Luck's turning fast!" he whispered to Ruddy Miller, and led the way to the rear of the shop.

There is a world of psychology in salesmanship. Moran, who was a good talker at any time, was at his best when on a winning streak. He was a great believer in luck, and, when the fickle goddess seemed to favor him, believed, as he put it, in "riding his luck hard." With a confidence born of the belief that the tide had at last turned, he took his buyer along by easy stages, finally turning to the subject of a new lathe as an inspiration popped into his head.

"It's this way," he was saying as they came back to the front of the shop. "That lathe's a good bargain, and I can make it to you right. But in some ways you'd be better suited with a new one. Now I'll tell you what I'll do. That lathe lists new at an even thousand—nine hundred to the trade. You won't find anyone cutting the list price either. But here's what I'll do. I need cash right now. If you can handle a cash sale I'll get you a new lathe for an even fifty dollars under list price and have it delivered tomorrow with a clean bill of sale. That's just splitting my commission with you, and to square myself I'll have to take it up with the concern personally and show 'em it's worth the other fifty to me to work out a little installment plan of my own. Is it a go?"

IT WAS a go, after a little further explaining, in which Moran convinced his buyer that he was doing nothing illegitimate, and that it would mean a clean saving of fifty dollars from the straight list price. Then he called up the lathe people.

"This is Moran of the Golden State. I've just sold one of your lathes for immediate delivery on a rather peculiar arrangement. I'd like—what's that? Oh, all right."

He hung up the receiver and turned to Miller. "I had old man Preston himself. He says he's coming

over. The wind's certainly blowing our way, Ruddy, you old horse, you!"

The head of the lathe company walked into the little office just as a long, low-hung roadster hummed through the garage doors. He was apologetic for his treatment of their delinquent payments, grateful for the sale, and ready to acquiesce in anything Moran proposed. That gentleman, not slow to seize his advantage, and using his prospective sale as a club, secured Mr. Preston's consent to selling the new lathe on time. He agreed to give, however, a clean bill of sale on the first payment of one hundred and fifty dollars, accepting the Golden State note for the remainder of seven hundred and fifty, the subsequent payments to be made by Moran. This gave, in effect, a clean profit of fifty dollars' commission to the partners for their sale, and a loan of seven hundred and fifty dollars to be paid off at the rate of two hundred and fifty a month. The arrangement would enable them to straighten out the bank overdraft immediately.

BUT the end was not yet. The owner of the roadster was waiting for the interview with the lathe president to end. He wanted a set of absorbers—and more. He had recognized the old racer as the car that had passed him the preceding evening after a hard brush, and was filled with admiration for it.

"Tell you what I'll do, fellows," he ended, "I'll give you four hundred for the old wagon as it stands. There's going to be a race for has-beens pulled off by one of the newspapers as a big stunt, and I can go in and cop the money easy. I don't believe there's a man in town realizes that there's a real racer in the city that dates as far back as that. And, what's more, I saw how you fellows handled that old buggy last night. If you'll go in with me and help out, tuning her up and all that—one of you mechanic and the other relief driver if we have to have one—I'll split what prizes we draw down and make it worth your while besides. What do you say?"

They said. They said promptly and with decision. Also with pleasure. Later, when their affluent new-found acquaintance and fellow-racing-pilot-to-be had left, Billy Moran turned to Ruddy Miller for the last time on that eventful day.

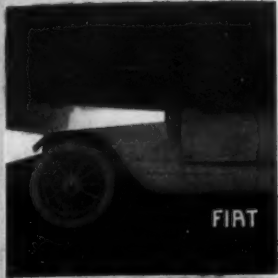
"Ruddy, you old horse, did you ever hear of such luck in all your life? Why, we're on easy street a mile! Luck! I wonder what in the world could have started 'er rolling!"



Advice to Tourists

Hide the car and change your make-up before getting rates at country inns

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FIAT



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AUTOMOBILE owners of experience know that simplicity combined with successful operation gives the greatest reliability. Simplicity is the hall-mark of experience in design and manufacture.

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are designed and manufactured by the Westinghouse Electric and Manufacturing Company, pre-eminent in the electrical field ever since the beginning of the electrical industry. Therefore, these systems are characterized by rugged simplicity and reliability.

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The powerful starting motor spins the engine on the push of a pedal, insuring a quick start under severest conditions, with minimum drain on the storage battery.

High efficiency insures economical operation.

In the following list of 1914 cars using Westinghouse Electric Systems, there is a car to suit every purchaser.

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- * Chadwick Engineering Works, "Great Six"
- * Chandler Motor Car Co., "Light Six"
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- * C. W. Davis Motor Car Co.
- * Dorris Motor Car Co.
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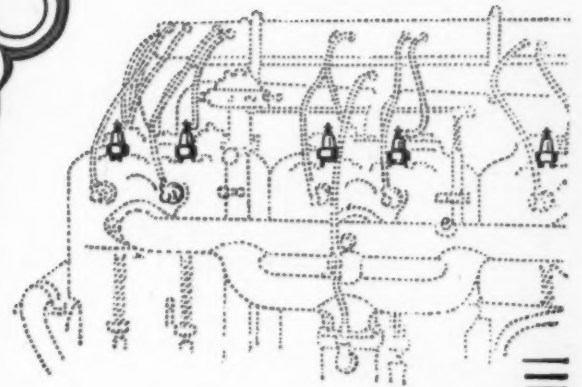
- * Starting, Lighting and Ignition
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—an efficient spark plug is just as necessary to your motor as the main spring is to your watch—that's why you need the

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Spark Plugs are an important part of the ignition system—any old piece of china, a wire and a shell of soft iron can form a spark plug, but it wouldn't give service. Investigate this difference in spark plugs; it's important.

Bosch Spark Plugs are—

substantial and therefore economical—nickel points and Steatite insulator, an unbreakable stone, insure long life.

simple—the method of construction eliminates joints and consequent leakage of compression or power. Easy starting and slow operating speeds of your motor are made certain—you get the high speed results too.

reliable always—they deliver a broad ribbon like spark with even regularity, giving positive ignition to all gas in the cylinders. This develops full power and flexibility of your engine.

Bosch Spark Plugs are the standard equipment of such discriminating manufacturers as Peerless, Pierce-Arrow, Hudson, Garford, Speedwell, Jeffery, Velie, Fiat, Marion, Case, Mercer. Insisting on Bosch gives you equal equipment.

In design, material and workmanship the Bosch Spark Plug shows the result of careful, scientific and practical investigation. In every detail it possesses the same superlative degree of excellence that has given Bosch Magnetos their premier position.

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Each

If your dealer hasn't stocked, send direct to nearest Bosch Service Station. Spark Plug information sent on request.

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The Specter of Gasoline

By Theodore M. R. von Kéler

ON OR about March 1, in the year of grace 1914, a gallon of gasoline will cost the motorists of America thirty cents—provided they live within easy distance of a distributing station of the Standard Oil Company. If they live in the mountain and desert districts, they may have to pay anything from half a dollar to a dollar for four quarts of the truly "precious" fluid. Thirty cents for what two years ago could be bought for ten and twelve cents at retail? Who is to blame?

According to a careful estimate, there are in active use in the various countries of the world about 1,700,000 motor cars, and of this grand total more than 60 per cent roll over the roads of the United States. Conservatively estimated, each pleasure car covers about 5,000 miles in the course of a year, while a commercial car is not considered a good investment unless it makes at least thirty-five miles a day, or about 10,000 miles a year. The mileage covered by the 1,000,000 pleasure cars in this country, therefore, totals 5,000,000,000 miles, and that of the commercial cars (100,000 in number) 1,000,000,000 miles.

Why Gasoline Is Scarce

IN ORDER to calculate the quantity of gasoline consumed by this immense fleet of motor vehicles during the course of a year, one must remember that some of the heaviest trucks travel only three and four miles on a gallon, that lighter trucks and heavy pleasure cars use from six to eight gallons in traveling fifty miles, and that only the lighter pleasure cars and delivery wagons get more than ten or twelve miles out of one gallon. Without running the danger of exaggerating, it may be stated that fully 500 gallons are required by the average pleasure car, and 2,000 gallons by the commercial vehicle in the course of twelve months.

The total quantity of gasoline consumed by motor vehicles alone in the United States is now about 700,000,000 gallons a year.

To produce this enormous fuel supply, 7,000,000,000 gallons of crude petroleum have to be subjected to fractional distillation—and the entire output of crude petroleum in the United States during 1912 was only 220,000,000 barrels, or 8,240,000,000 gallons, leaving the mere pittance of 1,240,000,000 gallons of crude oil for the thousands of stationary gasoline engines, 300,000 motor boats and motorcycles, and hundreds of huge farm tractors and fire engines. The output during the year 1913 is thought to have been even less than that in 1912, although reliable statistics for this period are not available as yet.

To make matters still worse, several of the more productive Eastern wells have "run dry," and the newly opened oil wells in California, Texas, and Louisiana only yield about 2 per cent of gasoline from the crude material. The supply of crude oil has remained practically stationary, the gross number of automobiles and other motor-driven vehicles has increased, and—still worse—each of these vehicles covers a greater mileage per year because of the gradual elimination of a "closed season" and the greater reliability of the cars. The latter keeps the machines more on the road and less in the garage.

Hunting for a Substitute

THE situation, therefore, stands as follows: An ever-increasing number of cars with increasing individual demands for fuel; a falling or at least stationary supply of the crude oil, and a dearth of distilling plants equipped in the best possible manner to extract from the crude material the greatest possible quantity of useful gasoline, or "gas." The owner of a small runabout pays but a very small amount more for his fuel than he did two years ago, but the merchant who operates a fleet of heavy delivery wagons rightly considers the high cost of gasoline a matter of vital importance, and one that should be adjusted promptly.

Engineers and inventors, chemists and automobile manufacturers, taxicab companies and private motorists—all are engaged in a search for something that will solve the problem of adjusting a falling supply to an increasing demand.

The search for satisfactory substitutes, rendered more intense by reason of the large prizes offered by automobile organizations for a successful solution of the problem, so far has not been productive of much that can be considered promising. True, the ceaseless work of thousands of investigators has brought to light many substances which, by a stretch of the imagination, might be considered fuels for internal combustion engines, but they have all been "tried and found wanting." The only really promising materials are benzol, kerosene, denatured alcohol, and a new distil-



late of petroleum—practically a mixture of gasoline with slightly heavier constituents of petroleum, obtained by a new process of distillation. As this, however, depends upon crude oil as a basis, it cannot be said to offer many advantages over gasoline.

Benzol, which is at present causing a good deal of attention in Europe because of the attitude of Germany in its favor, promised for a time to become the rival of gasoline. Benzol is a coal-tar product and is manufactured in great quantity on the continent of Europe. Both France and Germany, in the endeavor to render themselves independent of the rest of the world as far as automobile fuel is concerned, foster the introduction of benzol with all their power. All the subsidized motor vehicles of Germany, for instance, to the number of nearly 1,000 heavy trucks, are fitted with carbureting devices which will permit the use of benzol and gasoline without material changes in their adjustment. Technically, therefore, no serious objections can be raised against the use of benzol; by using properly adjusted carburetors it may be rendered just as effective and satisfactory as high-grade gasoline. The trouble with benzol is the limited quantity which can be produced. It is an absolute impossibility at the present time to distill enough benzol from coal tar to supply the extraordinary demands of the internal combustion engine in its various applications.

The Rehabilitation of Kerosene

OF FAR greater importance is kerosene—the old, familiar "coal oil" of bygone years. Kerosene carburetors in increasing numbers are making their appearance. The lower rate of vaporization is compensated by special arrangements in the carburetor, or by preheating devices. When thoroughly gasified, and properly mixed with the requisite amount of air, kerosene is an exceedingly satisfactory fuel, leaving no carbon and giving a smokeless, odorless exhaust. Its one drawback heretofore has been the difficulty of starting an engine "cold" on kerosene, and even now this is one of the most serious hindrances to its univer-



sal adoption. The introduction of mechanical engine-starting devices and the addition of auxiliary small tanks with gasoline for easy starting are gradually eliminating this trouble, and many inventive minds are engaged in banishing the last of the kerosene carburetor troubles by devising ways and means for increasing the volatility of kerosene. The injection of heated air into different points of the intake is manifold, the heating of the kerosene fuel before admitting it to the carburetor, and the introduction of mechanical mixers in the intake pipe of the motor are resorted to in many instances with good results. In operation a kerosene carburetor is only one-third as expensive as a gasoline device, which fact renders its adoption highly attractive to the merchant who uses many trucks, and the taxicab company with its fleet of vehicles. That a sudden increase in the use of kerosene in automobiles, however, would cause a rise in its price is self-evident.

Red tape, revenue troubles, politics, and popular prejudice all play important rôles in the great trag-

comedy entitled "Why Denatured Alcohol is Taboo!" From a scientific standpoint, alcohol is far more suitable for internal combustion motors than gasoline, and in regard to general cleanliness it has

many advantages over both gasoline and kerosene. The exhaust from an alcohol engine is never clouded with dark smoke, and its odor is not as obnoxious as that of a gasoline engine. "Denatured alcohol," says the United States Bureau of Mines in its exhaustive report on the fuel values of alcohol and gasoline, "more nearly approaches the ideal fuel than does gasoline, for at any one compression it shows a greater efficiency." To retard the general adoption of denatured alcohol in automobile and stationary engines, by means of red tape which falls utterly of its purpose, seems a short-sighted policy for which Americans pay annually millions of dollars. Means can be found and will be found, by which alcohol may be distilled in every section of this country in quantity sufficient to meet at least half of the demand for a liquid fuel for motor cars. The raw material is at hand on every farm, in every town; highly improved machinery for distillation is available, and safe materials for denaturing the distillate are in everyday use—yet the production of denatured alcohol in this country is pitifully small.

Denatured Alcohol the Solution?

WHY? Because of the fear that the Government might lose a part of its revenue in the misbranding of the product. A hundred million gallons of denatured alcohol could be produced annually from farm refuse, sawdust, and "green" potatoes, without in the least affecting the agricultural output of the farms. The raw material is obtainable everywhere for the proverbial "song"—yes, there are even cases in which the distillery could get pay for removing the useless refuse to its plant—and yet capital seems strangely reluctant to entertain schemes of alcohol distilleries in which the product is considered as "fuel" instead of as "liquor." And this reluctance of the moneyed interests to invest is equalled, if not exceeded, by the reluctance of the general public to consider alcohol as anything else than an inebriating liquid. A campaign of education on this subject might cause a complete revolution in the field of internal combustion engines and might—just "might"—cause some of the big capitalists to erect a few alcohol distilleries. Alcohol intended for "commercial purposes" is denatured by the addition of pyridine bases, usually of offensive odor and taste. In the United States the accepted denaturing medium is wood alcohol, which is added to grain alcohol in the proportion of one to ten parts. One-half of one part benzene is then poured into the mixture and "commercial alcohol" is ready for the internal revenue officers.

There is no doubt whatever that under proper conditions denatured alcohol can be manufactured for less than ten cents a gallon. With gasoline rising in price steadily and continuously the time is not far distant when it will prove far cheaper to manufacture alcohol for automobiles than gasoline.

Alcohol Should Bring Down Gasoline

AS LONG as the retail price of alcohol is higher than that of gasoline it is, of course, foolish to expect the former to oust the latter, especially as a slightly larger quantity of alcohol vapor is required to produce the same explosive force. As soon, however, as the prices of the two fuels are about the same, the advantages of denatured alcohol must make themselves felt to such an extent as to enlist the good will of capitalists. Alcohol at twenty cents a gallon would put gasoline back into the position it occupied before the advent of the motor car.

But substitutes are not the only hope of the motor-car user. A more thorough understanding of the carburetion question by owners and drivers would result in an extraordinary saving of gasoline. The undisputed fact that one driver can go fifteen miles on a gallon in the same car in which another covers only ten miles per gallon proves that great quantities of gasoline can be saved by a more rational handling of the automobile. The average owner-driver knows very little of the theories of carburetion and explosive mixtures. He runs his car by "rule of thumb" and is wasteful in the extreme. Not that he intends to be extravagant! It is simply a case of ignorance which can be cured by a few hours' study of the problems involved. While waiting for the engineers to produce alcohol or kerosene carburetors and for the financiers to back a few large alcohol distilleries, the motorist who feels the pinch of high gasoline prices cannot do better than study the problem of carburetion and take a few lessons from an experienced driver.



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Other tires may take you away on your trips, but it takes this *absolutely puncture-proof* equipment to bring you back without mishap.

Resilient as any regular tire—you ride on air, yet freed from all care. And you save inner tubes. Sold under an absolute

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Every Lee Puncture-Proof must give you your money's worth—most users get more. You must get your full mileage, *and no punctures*, or you get back every cent paid for insurance against puncture.

Have you ever heard of any other tire that was sold on such a basis? Why be at the mercy of a little nail in the road? Why be satisfied with anything *less* than this puncture-proof, objection-proof tire service?

Booklet "D" tells the whole story—describes this Puncture-Proof in detail, shows the Guarantee, explains the perfected Zig-Zag Non-Skid Tread in which it is furnished if desired.

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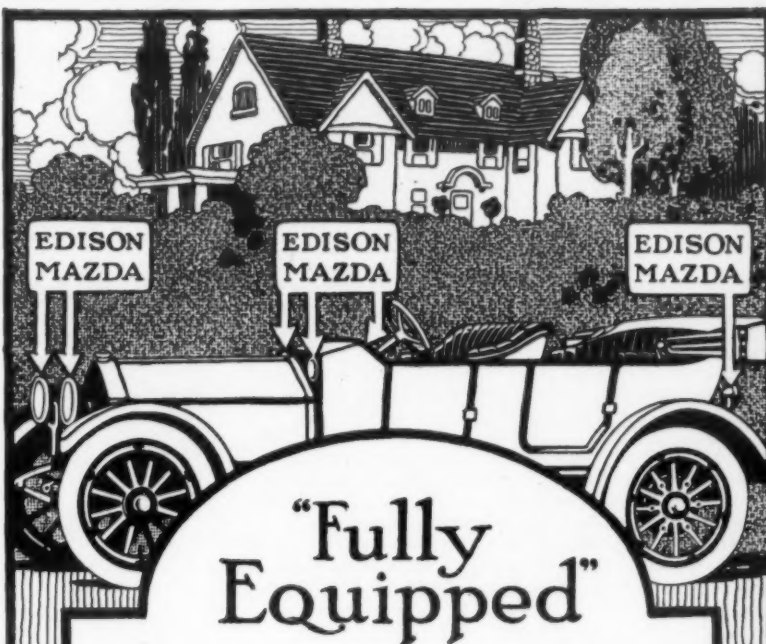
Sold in all leading cities. Look up "Lee Tires" in your telephone book.



"Smile at Miles"

Not an outside covering—nor an inner case to be attached. Imbedded in rubber, within the tread are 3200 armor steel discs—every one good for a smile (and more than a mile). Scientifically overlapped, so no nail can enter. Every disc treated to prevent heating or working loose.

Made, like all Lee Tires, of finest rubber and strongest fabric; all vulcanized by the perfected process that most tire makers can use for only a small portion of their product.



ELECTRIC lighting of course. Every car thus equipped is an example of the modern lighting system, electric, acknowledged to be superior in cleanliness, convenience, safety and satisfactory operation. In practically all of the electrically-lighted cars the sturdy little Edison Mazda Lamps are being used for renewals.

EDISON MAZDA Automobile Lamps

As a part of the initial equipment EDISON MAZDA Lamps are used in the following cars:

American	Indian Motor Cycle	Oldsmobile
American LaFrance	Imperial	Overland
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Bailey Electric	Jackson	Pilot
Chalmers	Kline	Pope-Hartford
Chevrolet	Lancia	Pratt
Cole	Locomobile	Pullman
Columbus	Lozier	S. G. V.
Cunningham	Marmon	Seagrave Truck
Davis	Maxwell	Simplex
Dorris	Mercer	Stearns
Gramm-Bernstein	Michigan	Studebaker
Truck	Moyer	Velie
Haynes	Norwalk	Winton

This country-wide use of Edison Mazda Automobile Lamps is a guide to every car owner buying electric bulbs for his car. Insist on EDISON MAZDA Lamps—the highest efficiency of your electric lighting system cannot be maintained by inferior and cheaper lamps. The name EDISON MAZDA insures the right incandescent lamp for your car

Back of these lamps is that world-wide research known as "MAZDA SERVICE."

Whatever the electric lighting system on your car may be, there are EDISON MAZDA Lamps designed for it. Write for your copy of folder on "The Standard Incandescent Lamp Equipment for Automobiles," it details the electric lighting equipment of over a hundred cars.

EDISON LAMP WORKS
OF GENERAL ELECTRIC COMPANY
General Sales Office Harrison, New Jersey

Agents and Service Stations Everywhere

A Motor "Economy" Trip Through Europe

By Herbert Sawyer

IT WAS a pleasant July day for London. Late in the afternoon a motor car wound in and out among the ponderous busses and ever-present taxis, and finally turned her head into Kingsland Road. As the last vestiges and landmarks of the great city were left behind, the four young Americans within the touring car felt a real sense of joy, for they were beginning to fulfill plans that they had made months before. For this is the true account of an automobile economy trip made during the summer of 1913.

The automobile was purchased in America, shipped to Liverpool, and driven under American number plates to London. When we applied for membership in the Automobile Association of Great Britain, an inspector had a delirious ride in and about Piccadilly Circus, but the license was granted, the number plates changed, and the official insignia of the "A. A." Association of Great Britain was placed on our radiator. This was really worth while, for an "A. A." uniformed man often placed us on the right road, told us about the "trap" ahead, and gave us as courteously a salute as if our car contained his king and queen. We also secured the international pass through this organization, and with some regrets deposited £80 for the six European countries in which we intended to travel.

Our Roof Was the Sky

THERE were two ways in which this motor party planned to make the tour economical. In the first place, we would endeavor to sleep out each night with our automobile. Second, we would ourselves prepare at least two meals each day in camp. In the metropolises we bought four tarpaulins, four woolen blankets, a petroleum stove, cooking utensils, and provisions. Then a trunk carrier was attached to lend assistance in this general parcel traffic. Each man was allowed one suit case for clothes and personal effects. One case was filled with the camp kit and provisions, and a sixth appeared uncomfortable with cameras and guide books. The tarpaulins were strapped above the cases on the trunk carrier, the blankets were carefully folded and placed under the cushion of the rear seat, and our combination raincoats and dusters were usually stowed in the hood.

This was the make-up we presented on that July afternoon as we rolled along the fine macadam roads of old England. We were on our way to Cambridge, but cared not where we camped that night. It was delicious riding in the early evening past the substantial English cottages, partially hid from view by the trellised roses and neatly trimmed hedges. Is there any land so serene and restful as the English countryside? When approaching darkness compelled us to halt, we were readily granted permission to make our first camp beside a stack of alfalfa hay. The tarpaulins and covers were laid upon the ground, already damp, and, rolling up in our blankets close together, we looked for a short time only into the faces of the myriads of stars, and then were off in dreamland. The sun had scarcely cast a ray of light through that dewy grass before we were awakened by the curious villagers. With mingled credulity and delight each would know why we chose to sleep out of doors and cook our own meals. That a motor party should prefer to lead this kind of life was a never-ending cause of inquiry. The little compressed-air petroleum stove warmed up to its task early. Before the village bell had rung for seven we sat down to a delectable breakfast of bacon and eggs, bread, butter, strawberry jam, and cocoa.

The day was typical of many. The privilege of freely conversing with and living among the common people away from the beaten track of tourists is one of the most profitable parts of such a method. On the Continent itself one must recall all that he has learned of foreign languages and put it into usable form. We found that application for a few hours to an entirely new language will reward one in an agreeable and surprising manner in a strange country. We also had to barter for our provisions. The English and German usually had one price, but it was in keeping with economy to offer to the Italian or the Frenchman about 50 per cent of the price that was asked for the commodity.

Not only did we have many pleasant and a few unpleasant experiences with the peasants, but the police were in no wise strangers to us. On many a night peasants have regarded with suspicion and distrust

harvesting, and the industrial and manufacturing processes of the various countries. As we were entering Cannes in southern France one morning

we passed a pottery. There seemed to be a general desire to see the process of molding, baking, and glazing the handsome pieces. Now a fine piece of pottery means much more to me than it did before my visit. It was near little Loch Oich that we happened upon a lone mountain. We found an inscription written in four languages upon the four sides. It proved to be a memorial of the vengeance of feudal justice inflicted by a Scottish clan upon seven murderers of a family belonging to the clan. The heads of the seven murderers were washed in a spring at the base of the monument.

The Most Inexpensive of Holidays

I HAVE enumerated some of the advantages of motor-ing in Europe over other means of travel. Now I am confident that we enjoyed many advantages that other motorists have not had. When one is in a foreign country, it is much preferable to be surrounded by the natives of that country than by other tourists and a large number of "penny-catch" domestics. The buying and the cooking of our own food was a very desirable procedure in many respects. It was not difficult to purchase fresh milk and eggs. One could buy many kinds of fruit direct from the producer. In Italy we picked our own grapes and paid a ridiculously low price for them. Then there was the enjoyment of camp life.

Our garage charges were saved because one man in the party was an automobile mechanic. It was a great saving to do our own repairing. If the valves needed to be ground, or the cylinder head needed to have the carbon removed, all got into their automobile work clothes, and went at it with vim.

We slept beside the car each night, and took precaution to raise the top in case of dew or rain. In large cities the machine was kept in "cold storage" during a large part of our stay, while the tourists took refuge in a hotel.

I would like to write a volume about European roads, partly because I have the material, and partly because of my appreciation for them. Only in Belgium and northern France did we find primitive roads made of great uneven paving stones. But the 5,750 miles traveled in those ten weeks were made very pleasant because of uniformly good macadam or brick roads. We cannot place this factor too high in economizing time and expense.

We visited seven countries during our ninety-three days in Europe. In Great Britain we motored 1,977 miles in nineteen days, and three weeks were spent in London. In Holland we traveled 429 miles in five days; in Belgium, 153 miles in three days; in France, 1,197 miles in fifteen days; in Italy, 1,088 miles in seventeen days; in Switzerland, 457 miles in six days; and in Germany, 449 miles in seven days.

Arriving at Harwich on our return from Europe, we drove to London and spent two days in placing the machine in first-class condition. Meanwhile we inserted a sale ad in three London dailies. The third day a total of fifteen buyers appeared in response to our advertisement, and we sold our faithful car to the second buyer for nearly three-fourths the purchase price. Then we boarded the *Mauretania*, sailing the next day from Liverpool (strangely), glad to embark for America.

Following is an abbreviated expense account of one of the party:

AUTOMOBILE:	
Depreciation	\$37.00
Supplies before sailing	6.79
Transportation to and supplies in	
England	34.14
Gasoline, oil, and repairs	58.00
	<hr/>
	\$135.93
SUBSISTENCE:	
Provisions and hotel bills for 93 days	69.89
PERSONAL:	
Transportation and miscellaneous	164.98
Grand total for tour	<hr/>
	\$370.80

Under what other circumstances could you have so delightful a three months' tour for the money?



The progress of our faithful car from sea to land

the strange motorists that were unwilling to go to the city hotel. The police were notified, and would swoop down upon us before midnight or in the early morning, believing that they had caught some surviving Paris auto bandits. They never came singly or in pairs, but by fours and sixes, their heavy rifles glinting in the rays of the bright electric flash, and the great hound pulling hard at his leash. Evidently they were prepared to fight to the last ditch. Our chief armament consisted in a few apples and a skillet, along



We were readily granted permission to make our first camp beside a stack of alfalfa hay

with passports, an international pass, and a driver's license. With these we were able to quench their ardor for notoriety and quiet ourselves in sleep again.

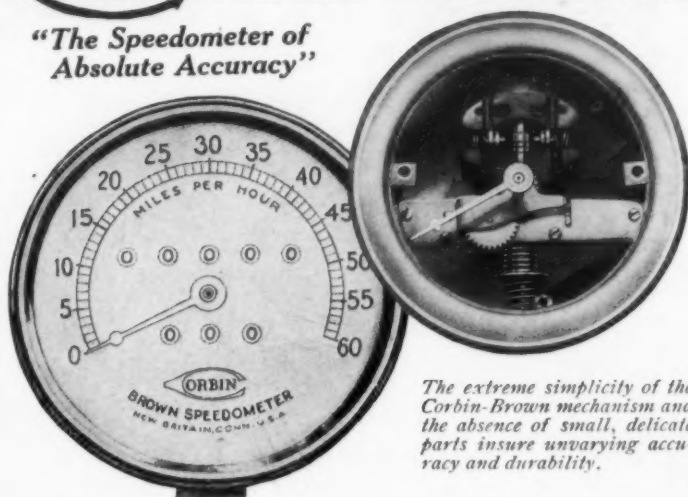
The motoring-camping combination offers the highest degree of independence and freedom in sightseeing. One is never hurried along with a large group by a guide. We were not compelled to leave an interesting object or locality before we desired. There were no coaches in waiting upon us or trains to be met. And then again we could leave just as soon as we were ready. Fortunately in this matter our likes and desires were pleasingly unanimous.

We Saw the World as It Is

ANOTHER advantage in traveling by a motor is that one sees not only what he intended to see, but many unusual and unplanned-for things. It is possible to enumerate only a few of these here, such as dress, manners, folklore, sayings, customs, occupations, products of the soil, old-fashioned methods of

ORBIN-BROWN SPEEDOMETER

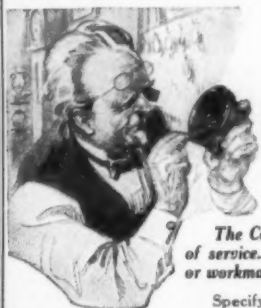
"The Speedometer of
Absolute Accuracy"



The extreme simplicity of the Corbin-Brown mechanism and the absence of small, delicate parts insure unvarying accuracy and durability.

Built with the precision of a high grade watch.

Centrifugal in principle. Therefore unaffected by climatic changes or increased electrical influence exerted by electric lighting system, electric self starters, etc.



Records low mileage as accurately as high. Has a 100,000 mile season odometer.

Indicator pivoted at centre of dial, and does not obstruct the trip odometer figures.

Made of solid brass and case hardened steel.

Every Corbin-Brown calibrated by hand and tested to absolute accuracy before leaving factory. Write for new 1914 catalog.

The Corbin-Brown guarantee is not based on mileage but on a full year of service. We will replace any defective parts due to mechanical defects or workmanship, if returned prepaid to our factory subject to our inspection.

Specify the Corbin-Brown Speedometer! Sold by dealers everywhere.

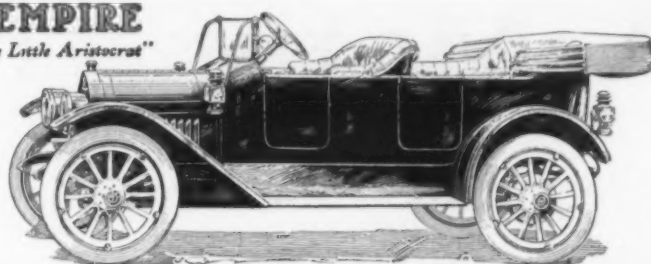
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THE AMERICAN HARDWARE CORPORATION, Successors
NEW BRITAIN, CONN.

BRANCHES: New York Chicago Philadelphia

EMPIRE

"The Little Aristocrat"



Completely Equipped
New Series Model 31

Now \$900

5-Passenger Touring Car
110-in. Wheel Base

At just \$900 the EMPIRE Touring Car offers a marvelous car value. It is more sumptuously appointed than ever. It is *completely* equipped.

This new low price—\$50 less than last year's car—is due to our quadrupled output.

Thus "The Little Aristocrat" of motordom establishes a new value standard that instantly appeals to dealers and automobile buyers everywhere.

Completely Equipped \$900, including

Demountable Rims	Rain Vision Windshield	Prest-O-Lite Tank	Double Tire Irons
Mohair Top	Tool and Tire Kits	Gas Head Lights	Oil Sight Feed
Top Envelope	Extra Rim	Side and Tail Lamps	Dash Air Adjustment
Unit Power Plant	Stewart Speedometer	Eisemann Magneto	Turkish Upholstery

The trend today is toward lighter cars. For lightness means *economy*, less wear and tear, greater mileage, lower fuel cost, reduced upkeep all 'round. And it was to meet these very requirements that the EMPIRE Car was designed.

This is its fifth year. And despite our four-fold increased facilities, this year's output will again fall short of the demand.

With the "Big Ones"

This is the car that traveled nearly four thousand miles in the great Indiana-Pacific Tour. Traveled with cars many times its weight and price. Traveled over trails never before attempted by any tour. It made a wonderful record.

Its light weight has not meant a sacrifice

of power. Oversize axles, steering knuckle, brakes, springs, etc., mean surplus strength—the utmost margin of safety.

This one model only. One policy. One concentration of effort. Built by successful men of large resources. A car that has long won success and popularity.

Write for the 9x12 illustrated book that tells the great story of the Transcontinental Tour. Sent Free.

Enthusiastic Dealers

Dealers everywhere favor the EMPIRE because it has met every demand for a light-weight touring car, while this new price has even increased its popularity.

Dealers in open territory should write for our sales plan which shows how we will help them sell more cars.

EMPIRE AUTOMOBILE CO., 445 N. Capitol Ave., Indianapolis, Ind., U. S. A.

TO APPRECIATE THE KING, EXAMINE ITS COMPETITORS

Moderate in price, but built with "expensive car" precision and solidity—not "ground out" in vast quantity

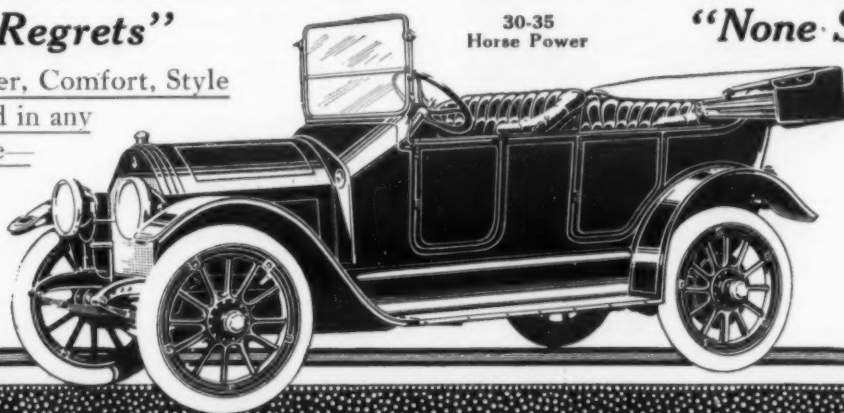
"The Car of No Regrets"

MORE Service, Economy, Power, Comfort, Style and Equipment than can be had in any other car near the KING'S price—

\$1095

WITH EQUIPMENT

Ward Leonard Starter and Generator, \$100 net additional.



"None So Easy Riding"

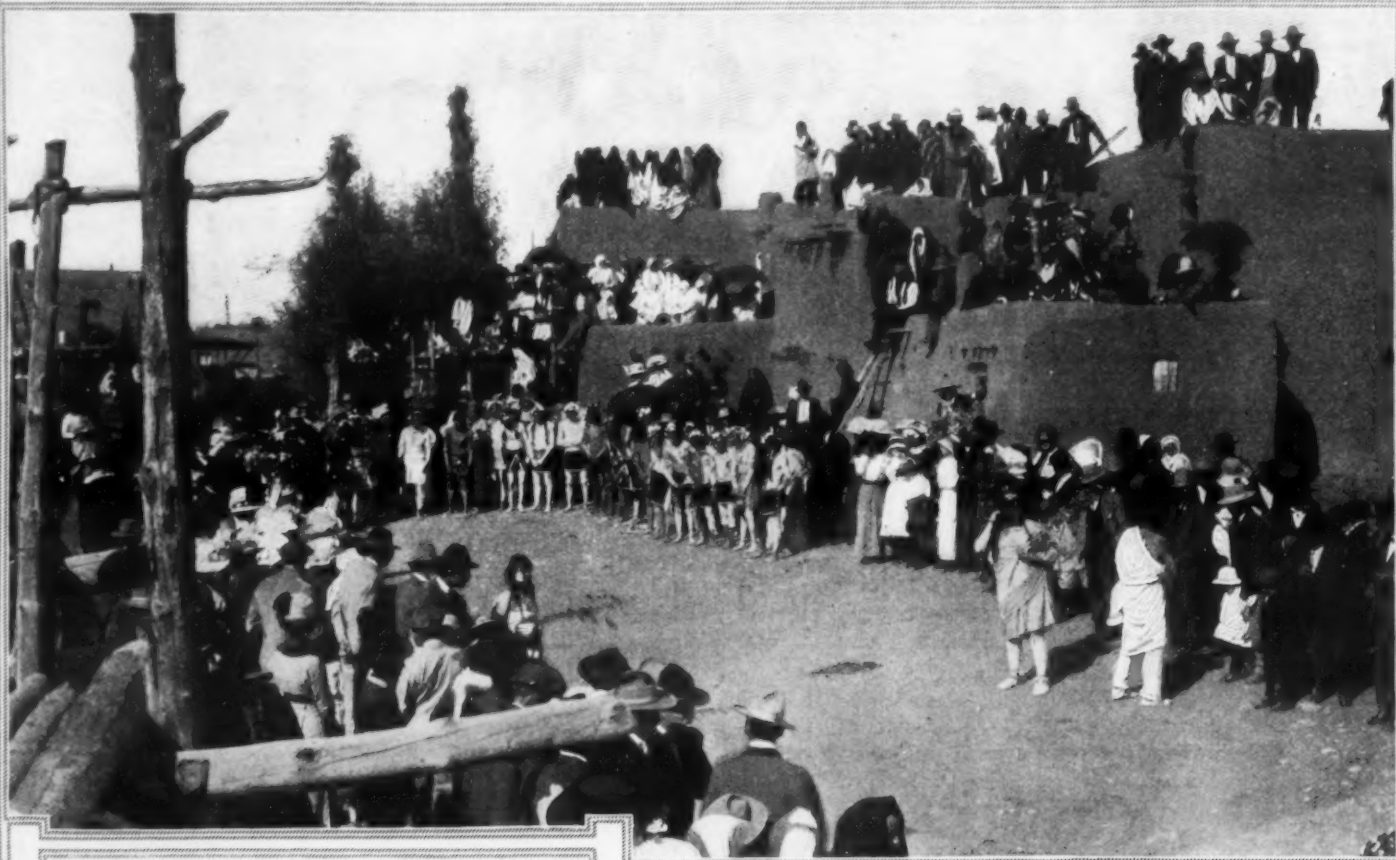
The KING'S cantilever rear springs make all auxiliary shock-absorbers unnecessary; prevent "side swing" and assure long life to car and tires.

Write for catalog

KING MOTOR CAR CO., Detroit, Mich.
New York Agency, Broadway at 52d St.

AGENTS—Some choice territory still open. Wire today.

KING



This picture of a relay race shows how little the Pueblos have been touched by civilization

The Magical Southwest by Motor

THE possibilities of this little-known Southwest of ours, for the automobile tourist, are infinite. To reach this Wonderland from the East, the best way is to follow the old Santa Fe Trail, which played such an important part in the early frontier days, across Raton Pass, into Raton, N. Mex., just south of the Colorado border. Here the trail branches, the main road going south to Las Vegas, and the other veering to the west, through Cimarron Cañon, with its picturesque winding stream and impressive palisades, across the Taos Mountains, into Taos. About three miles from Taos is located the Indian pueblo of Taos, the home of seven hundred of the most independent and vigorous of all the Pueblo tribes. They live to-day practically as the Spaniards first found them, over three hundred years ago. The Taos Pueblo is four and five stories high, and is probably the most picturesque of all of the New Mexican Pueblos.

The Cañon de Chelly of Chin Lee. The 1000-foot walls are a rich red



The famous La Bajada Hill road out of Santa Fe constructed by convict labor



A view of the Grand Cañon of Arizona. Acres of petrified trees form a titanic confusion



Driving through the ghost of an old Mission church at Pecos, built by the Spaniards 13 years before the landing of the Pilgrims



Established—1880
Incorporated—1899

Oldsmobile
1914



THE SURVIVAL OF THE FITTEST

NEVER, since the beginning of the automobile industry, has there been such a determined insistence for genuine motor car value as there is at the present time.

Olds Motor Works has built into the Oldsmobile, since the very first model, a quality which has represented the utmost in automobile practice and engineering.

The 1914 Oldsmobile is the development of this foresight and honest policy and now stands—the greatest of all sixes.

Throughout the entire automobile manufacturing field are makers who are exploiting sixes, but the public is now educated to appreciate quality and reputation in a motor car, just as in any other commodity, and the inevitable has happened—the demand is now for a six-cylinder motor car with reputation, experience, and stability behind it—the day of the makeshift is over.

The popularity of Oldsmobiles this year is a natural outgrowth of this insistent desire for quality. The Oldsmobile was a pioneer in the six-cylinder field, and during the past decade has witnessed the passing of many new comers. Now, that the time has arrived when motor car purchases are made on merit alone, it has been fittingly and deservedly acclaimed the greatest six-cylinder motor car ever produced.

Combination 4 or 5-passenger Phaeton touring body type \$2975

Seven-passenger touring body \$175 extra

Limousine \$4300

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LANSING, MICH.



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is the slogan of
the great railways

You see it painted on every pillar and post and building along their lines.

And on the boulevard, the street, the country road—wherever you see the trail of the Goodrich Safety Tread you see another "Safety First" slogan.

Every time you see Goodrich Tires on an automobile you see a machine owned by a believer in "Safety First."

Goodrich experience, Goodrich knowledge, Goodrich skill and Goodrich methods (the result of forty-four years of rubber manufacturing) put "Safety First" in every thread of fabric and every atom of rubber in

GOODRICH SAFETY TREAD TIRES

The anti-skid feature (the safety tread) is great in itself. We have literally put brakes in it for you. The tough rubber fingers clean and grip the roadway. They hold your car to its course.

They stop the skid before it starts.

And you get so much more than just the anti-skid feature. You get constant control of your car—starting, twisting through traffic, turning corners, going fast or slow, and stopping—suddenly or gently.

More than that. You get lower-cost mileage all the time. The extra thickness of heavy Goodrich rubber in the safety tread means longer wear, longer life and longer service.

Don't take a chance. Make "Safety First" your slogan—and get it in Goodrich Safety Tread Tires—

Best in the Long Run—best in the Short Stop

The B. F. Goodrich Co.

Everything That's Best in Rubber

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Branches in
All Principal Cities

*There is nothing in Goodrich Advertising that isn't
in Goodrich Goods*



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